

# Analysis of VA Health Care Utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans

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*Cumulative from 1<sup>st</sup> Qtr FY 2002 through 2nd Qtr FY 2012 (October 1, 2001 – March 31, 2012)*

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# Introduction

This is a quarterly report on Veterans who have used Department of Veterans Affairs (VA) health care and who served in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), or Operation New Dawn (OND). Veterans are presenting to VA with a wide variety of physical and mental health conditions. The data represent the use of health care resources.

The data only apply to OEF/OIF/OND Veterans who have accessed VA health care, and do not represent all recent Veterans who have become eligible for VA health care. This report is created by comparing a Department of Defense (DoD) roster of returning Veterans to VA's electronic inpatient and outpatient health records.

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Check <http://www.publichealth.va.gov/epidemiology> for updates.

# Current DoD Roster of Recent Veterans

## Evolving roster development by DoD Defense Manpower Data Center (DMDC)

- In September 2003, DMDC developed an initial file of Veterans who had been deployed to the Iraqi and Afghan theater of operations using proxy files: Active Duty and Reserve Pay, Combat Zone Tax Exclusion, and Imminent Danger Pay.
- In September 2004, DMDC revised procedures for creating periodic updates of the roster and now mainly utilizes direct reports from service branches of Veterans who served in OEF/OIF/OND troops.
- VA's Office of Public Health provides ongoing assistance to DMDC to improve the accuracy and completeness of the roster and the variables provided.

## Latest update of roster

- Provided to VA's Office of Public Health, Post Deployment Health Group, Epidemiology Program on March 28, 2012.

## DoD's OEF/OIF/OND deployment roster

- Contains a list of Veterans who have left active duty and does not include currently serving active duty personnel.
- Does not distinguish between OEF, OIF, or OND Veterans.
- Roster only includes separated OEF/OIF/OND Veterans with out-of-theater dates through February 2012.
- Beginning with the 3<sup>rd</sup> Quarter Fiscal Year (FY) 2009 report, Veterans who received health care but subsequently died in-theater have been included in the quarterly analysis.
- The number of individuals who died in-theater from FY 2002 through 2<sup>nd</sup> Quarter FY 2012 (October 1, 2001 – March 31, 2012) is 5,693.

# How VA uses the DoD Roster of Veterans Who Have Left Active Duty

- The DoD roster is compared to VA's electronic inpatient and outpatient health records in which the standard International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification (ICD-9-CM) diagnostic codes are used to classify health problems in order to determine which OEF/OIF/OND Veterans accessed VA health care as of March 31, 2012.
- The data available for this analysis are mainly administrative data obtained from Veterans' VA medical records and are not based on a review of patient records or a confirmation of diagnoses. However, every clinical evaluation is captured in VA's computerized patient record. The data used in this analysis are appropriate for health care planning purposes because the ICD-9-CM administrative data reflect the use of health care resources.
- These administrative data have to be interpreted with caution because they ***only apply to those OEF/OIF/OND Veterans who have accessed VA health care***. These data do not represent all 1,478,370 OEF/OIF/OND Veterans who have become eligible for VA health care since FY 2002 (beginning October 1, 2001) or the approximately 2.4 million troops (as of March 31, 2012) who have served or are serving in the two theaters of operation since the beginning of the conflicts in Iraq and Afghanistan<sup>1</sup>.
- Because VA health data are not representative of the Veterans who have not accessed VA health care, epidemiological studies are required to answer specific questions about the health of all OEF/OIF/OND Veterans.
- Analyses based on this updated roster are not directly comparable to prior reports because the denominator (number of OEF/OIF/OND 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 VA's health care facilities and does not include Vet Center data or DoD health care data.

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<sup>1</sup> Source: CTS Deployment File Baseline Report, Defense Manpower Data Center. Provided to Epidemiology Program by the Armed Force Health Surveillance Center, 05/17/2012.

# How VA uses the DoD Roster of Veterans Who Have Left Active Duty

- These health care 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 manipulated to provide new data without first establishing the validity of the manipulations with VA’s Office of Public Health.
- Updated Roster of OEF/OIF/OND Veterans Who Have Left Active Duty through February 29, 2012
  - **1,478,370** OEF/OIF//OND Veterans have left active duty and become eligible for VA health care since FY 2002
    - **821,318 (~56%)<sup>2</sup>** Former Active Duty troops
    - **657,052 (~44%)<sup>2</sup>** Reserve and National Guard

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<sup>2</sup> Percentage reported is approximate due to rounding.

# VA Health Care Utilization from FY 2002 – 2<sup>nd</sup> Qtr FY 2012 among OEF/OIF/OND Veterans

## Among all 1,478,370 separated OEF/OIF/OND Veterans

- **804,704 (~54%)<sup>3</sup>** of total separated OEF/OIF/OND Veterans have obtained VA health care since FY 2002 (cumulative total).
  - **821,318 Former Active Duty in DMDC roster**
    - **451,494 (~55%)<sup>3</sup>** have sought VA health care since FY 2002 (cumulative total).
  - **657,052 Reserve/National Guard in DMDC roster<sup>4</sup>**
    - **353,210 (~54%)<sup>3</sup>** have sought VA health care since FY 2002 (cumulative total).

## Among the 804,704 OEF/OIF/OND Veterans who received health care since FY 2002

- **751,754 of 804,704 (~93%)<sup>3</sup>** have been seen only as outpatients by VA.
- **52,950 of 804,704 (~7%)<sup>3</sup>** have been hospitalized at least once in a VA health care facility.

## Comparison of VA Health Care Utilization

- Of the cumulative total of 804,704 OEF/OIF/OND Veterans who utilized VA health care from FY 2002 through 2<sup>nd</sup> Qtr FY 2012, 495,774 Veterans accessed care during the past twelve months (April 1, 2011-March 31, 2012). This represents about 8% of the ~6.2 million individuals who received VA health care during FY 2011 (October 1, 2010 – September 30, 2011).<sup>5</sup>

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<sup>3</sup> Percentage reported is approximate due to rounding.

<sup>4</sup> May include both former and current Reserve/National Guard Members.

<sup>5</sup> The most recent full fiscal year for which data are available. Obtained from Office of the Assistant Deputy Under Secretary for Health Policy and Planning.

# Number of OEF/OIF/OND Veterans by Veterans Integrated Service Network (VISN) Providing Treatment

## OEF/OIF/OND Veterans Treated at a VA Facility<sup>6, 7</sup>

Treatment Site	Number	Percent
VISN 1: VA New England Healthcare System	34,614	4.3
VISN 2: VA Healthcare Network Upstate New York	21,952	2.7
VISN 3: VA New York/New Jersey Healthcare System	29,320	3.6
VISN 4: VA Stars & Stripes Healthcare System	41,037	5.1
VISN 5: VA Capitol Health Care System	29,554	3.7
VISN 6: VA Mid-Atlantic Health Care Network	55,973	7.0
VISN 7: VA Southeast Network	64,623	8.0
VISN 8: VA Sunshine Healthcare Network	62,766	7.8
VISN 9: VA MidSouth Healthcare Network	46,636	5.8
VISN 10: VA Healthcare System of Ohio	26,398	3.3
VISN 11: Veterans in Partnership Healthcare Network	37,060	4.6
VISN 12: VA Great Lakes Health Care System	41,828	5.2
VISN 15: VA Heartland Network	35,096	4.4
VISN 16: South Central VA Health Care Network	75,406	9.4
VISN 17: VA Heart of Texas Health Care Network	63,138	7.8
VISN 18: VA Southeast Health Care Network	45,294	5.6
VISN 19: VA Rocky Mountain Network	40,096	5.0
VISN 20: VA Northwest Health Network	47,437	5.9
VISN 21: VA Sierra Pacific Network	40,573	5.0
VISN 22: VA Desert Pacific Healthcare Network	70,783	8.8
VISN 23: VA Midwest Health Care Network <sup>8</sup>	47,886	6.0

<sup>6</sup> The total number of OEF/OIF/OND Veterans who received treatment (n = 804,704) was used to calculate the percentage treated in any one VISN. A Veteran can be treated in multiple VISNs, but is counted only once in any single VISN.

<sup>7</sup> Percentages reported are approximate due to rounding.

<sup>8</sup> In 2002, VA merged VISNs 13 and 14 to form VISN 23.



# Demographic Characteristics of OEF/OIF/OND Veterans Utilizing VA Health Care<sup>9</sup>

	<b>% OEF/OIF/OND (n=804,704)</b>		<b>% OEF/OIF/OND (n=804,704)</b>
<b>Sex</b>		<b>Unit Type</b>	
Male	88.0	Active Duty	56.1
Female	12.0	Reserve/Guard	43.9
<b>Birth Year Cohort<sup>10</sup></b>		<b>Branch</b>	
1990 or later	0.5	Air Force	12.5
1980-1989	46.9	Army	60.3
1970-1979	25.5	Marines	13.8
1960-1969	20.3	Navy	13.3
1950-1959	5.9		
1926-1949	0.9		
<b>Rank</b>			
Enlisted	91.2		
Officer	8.8		

<sup>9</sup> Hospitalization and outpatient visits recorded as of March 31, 2012.

<sup>10</sup> The birth year category "1990 or Later" was added 2<sup>nd</sup> Qtr FY12 and the 1980 group was right truncated at 1989. This adjustment was made to equalize the number of years represented in each range. Birth year ranges were introduced 3<sup>rd</sup> Qtr FY 2009 in order to account for younger Veterans.

# Diagnostic Data

- Veterans of recent military conflicts have presented to VA for outpatient and inpatient care with a wide range of medical and psychological conditions.
- Diagnoses have encompassed more than 8,000 discrete ICD-9-CM diagnostic codes.
- The three most common diagnoses of 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-CM diagnostic category, “Symptoms, Signs and Ill-Defined Conditions,” was commonly reported. This is not a diagnosis of an unknown syndrome or unusual illness. This ICD-9-CM code includes symptoms and clinical findings that are not coded elsewhere. 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 of laboratory test abnormalities that do not point to a particular disease process and may be transient. The most frequently reported codes in this category, in order of magnitude are: General Symptoms (ICD 780), Symptoms Involving Head and Neck (ICD 784), and Symptoms Involving Respiratory System (786).

# Number of Diagnoses among OEF/OIF/OND Veterans

<b>Disease Category (ICD-9-CM Categories)</b>	<b>% OEF/OIF/OND (n=804,704)</b>	
	<b>Number</b>	<b>Percent</b>
Infectious and Parasitic Diseases (001-139)	124,968	15.5
Malignant Neoplasms (140-209)	11,156	1.4
Benign Neoplasms (210-239)	53,946	6.7
Diseases of Endocrine/Nutritional/Metabolic Systems (240-279)	260,330	32.4
Diseases of Blood and Blood Forming Organs (280-289)	30,504	3.8
Mental Disorders (290-319)	424,803	52.8
Diseases of Nervous System/ Sense Organs (320-389)	360,644	44.8
Diseases of Circulatory System (390-459)	171,955	21.4
Diseases of Respiratory System (460-519)	211,449	26.3
Diseases of Digestive System (520-579)	289,303	36.0
Diseases of the Genitourinary System (580-629)	121,861	15.1
Diseases of Skin (680-709)	172,651	21.5
Diseases of Musculoskeletal System Connective Tissue (710-739)	456,006	56.7
Symptoms, Signs and Ill Defined Conditions (780-799)	417,703	51.9
Injury/Poisonings (800-999)	232,142	28.8

# Number of Veterans with Mental Disorders<sup>11</sup> among OEF/OIF/OND Veterans Evaluated at VA Facilities since FY 2002<sup>12</sup>

<b>Diagnosis (ICD-9-CM)</b>	<b>Number of OEF/OIF/OND Veterans<sup>13</sup></b>
Post-traumatic stress disorder (PTSD) (309.81) <sup>14</sup>	228,361
Depressive Disorders (311)	174,799
Neurotic Disorders (300)	152,346
Affective Psychoses (296)	105,841
Alcohol Dependence Syndrome (303)	49,797
Nondependent Abuse of Drugs (305) <sup>15</sup>	35,360
Special Symptoms, Not Elsewhere Classified (307)	30,166
Specific Nonpsychotic Mental Disorder due to Organic Brain Damage (310)	27,880
Drug Dependence (304)	26,445
Sexual Deviations and Disorders (302)	25,424

<sup>11</sup> Includes both provisional and confirmed diagnoses.

<sup>12</sup> These are cumulative data since FY 2002. ICD-9-CM diagnoses used in these analyses are obtained from computerized administrative data. Although diagnoses are made by trained health care providers, up to one-third of initial diagnostic codes may not be confirmed because the diagnosis is provisional, pending further evaluation.

<sup>13</sup> The total will be higher than the 424,803 unique patients who 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.

<sup>14</sup> This row of data does not include a) information on PTSD from VA's Vet Centers, b) data from Veterans not enrolled for VA health care, or c) Veterans who received only a diagnosis of adjustment reaction, ICD-9-CM 309 (n=153,800).

<sup>15</sup> This category currently excludes Veterans who have a diagnosis of a) tobacco use disorder only, ICD-9-CM 305.1 (n=113,694); b) alcohol abuse only, ICD-9-CM 305.0, (n=29,195); or both tobacco use disorder and alcohol abuse, ICD-9-CM 305.0 and 305.1, (n=23,495).

# Summary

- Recent OEF/OIF/OND Veterans are presenting to VA with a wide range of health conditions.
- The 804,704 OEF/OIF/OND Veterans who have accessed VA health care do not constitute a representative sample of all OEF/OIF/OND Veterans.
- For example, the fact that 45% of VA patient encounters were coded as being related to diseases of the nervous system/sense organs does not indicate that 45% of all recent Veterans are suffering from this health problem. Only epidemiological studies can evaluate the overall health of OEF/OIF/OND Veterans.
- Percentages of VA health care utilization by recent OEF/OIF/OND Veterans may be influenced by combat Veterans' enhanced access to VA health care enrollment (in January 2008, this authority was extended from two years to five years post discharge) and exemption from co-pay charges for any health problem possibly related to their military service.