



An Overview of VA/DoD Joint Mortality Data Repository and Data From Studies Conducted by the Epidemiology Program in VA's Office of Public Health

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Agenda

1. Suicide Data Repository
2. VIEWR
3. Overview of Population Rosters
4. Overview of Existing Studies



Suicide Data Repository (aka Military Mortality Database)

Background

- 2009: Joint Strategic Plan (JSP 2010-2012) required a Suicide Data Working Group (Objective 2.8.A)
- The Working Group Found that:
 - Neither DoD nor VA has a comprehensive system for collecting longitudinal suicide data
 - DoD/VA are limited in their ability to:
 - Report suicides for inactive Guard and Reservists
 - Report on longitudinal issues related to suicide (e.g., suicides following short service periods; long-term outcomes following a suicide attempt)
 - Reliably report on topics requiring access to information about ALL veterans (e.g., suicide after deployment; risk for suicide following separation from service)

The Need for a Joint VA and DoD SDR

- The Report of the Blue Ribbon Workgroup on Suicide Prevention in the Veteran population noted that consistent, reliable suicide rate calculation was limited by barriers to data access and comparability
 - For example, even if using death certificates as the consistent definition of “suicide,” data may be biased by underreporting or inconsistencies in data collection across systems
- Biases may also be associated with determining Veteran status on death certificates (that are often subsequently used to calculate suicide rates)
- These issues are further complicated when attempting to compare suicide data within subgroups of the DoD or across the DoD and VA
- Studies may need to link multiple data sets (e.g., VA, DoD, NVDRS, and NDI data) to accurately compile VHA treatment history, service characteristics, and death circumstances

Development of the VA/DoD SDR

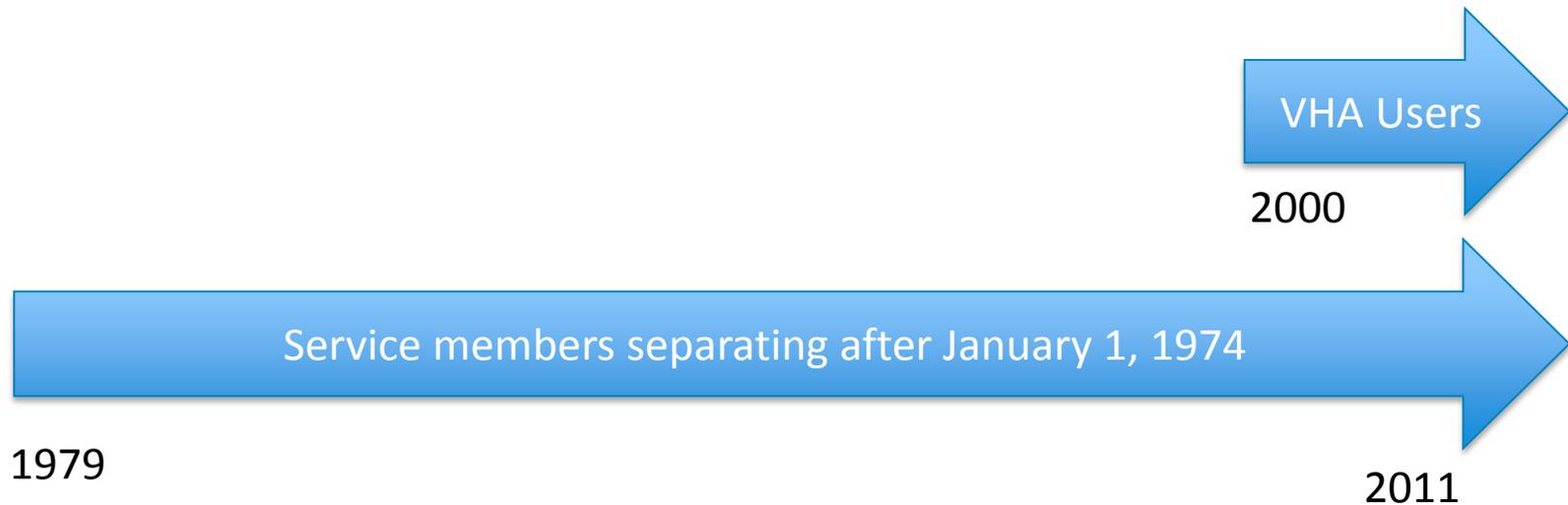
- Established in 2011, the VA/DoD Joint Suicide Data Repository (SDR) was developed as a comprehensive archive of data on suicide, and other forms of mortality, among U.S. Veterans and Service members.
- The SDR builds upon efforts of both agencies to support surveillance of suicide mortality and addresses previous gaps in knowledge.
- The acquisition of data from the National Death Index is supported by collaboration with the National Center for Health Statistics.
- Given the amount of information acquired and utility of data on all-cause mortality for both agencies, NCHS approved dissemination of data via the approved SDR application for all VA- or DoD-affiliated investigators and program offices.

SDR Data Sources

1. CDC's National Death Index Plus which contains approximately 2.5 million records (1979-2011)
2. Social Security Administration Death Register
3. Active Duty Master File
4. Reserve Components Common Personnel Data System (RCCPDS) Master File and RCCPDS Transaction File
5. Defense Casualty Analysis System (DCAS)
6. Active Duty Transaction File
7. Military Mortality Database (~240 data elements per record)
8. Veterans Health Administration Master User File

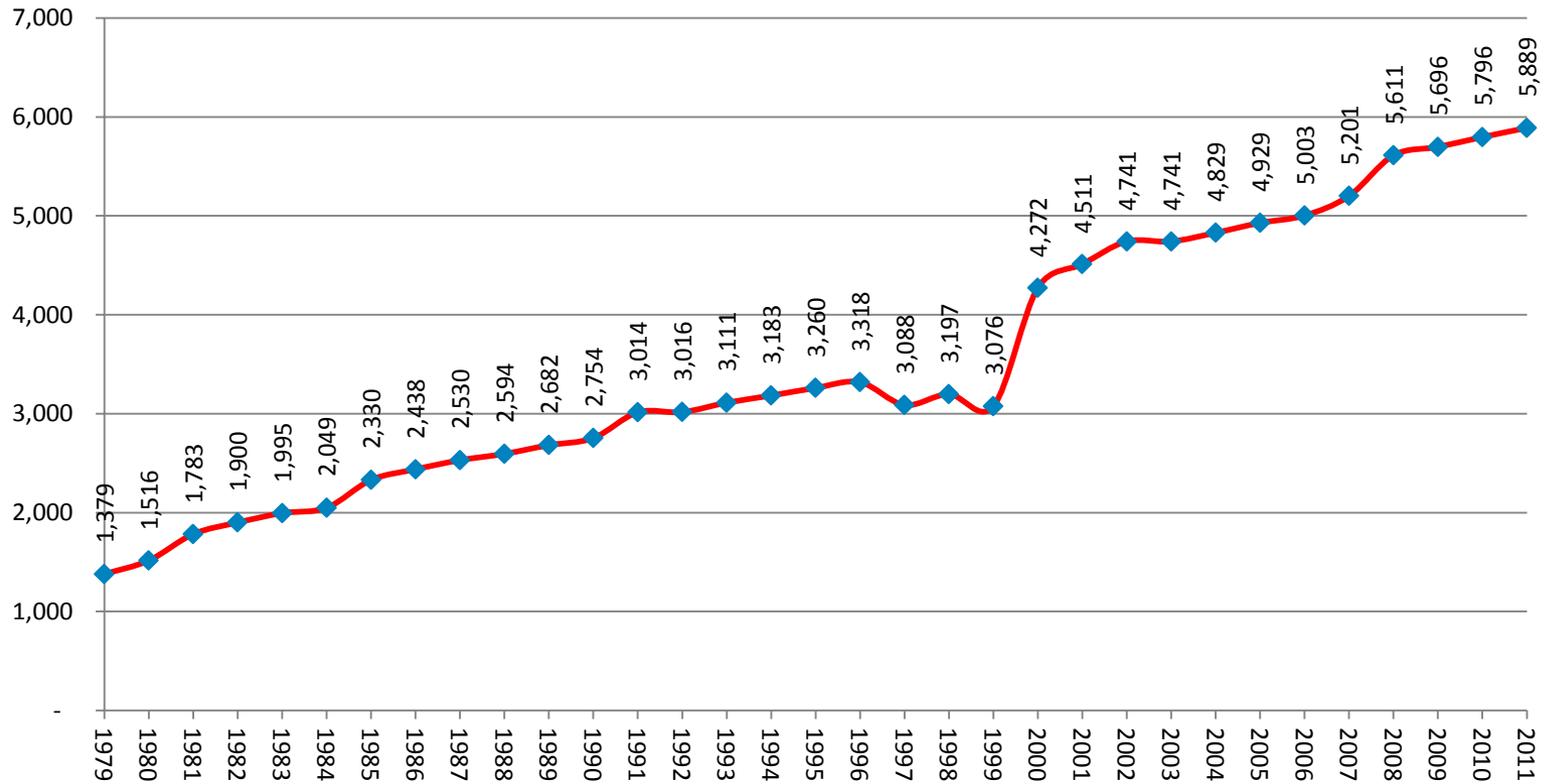
Current Mortality Archive

1. All-cause mortality data for all Service members who separated from active duty service (including deactivation NG & Reserve) between the years 1979-2011.
2. All users of VHA services, FY2000-2011



Records in SDR by Year

Service Member and Veteran Suicides by Year



Updates and Expansion

- Information on all-cause mortality is updated as new NDI data are made available from the National Center of Health Statistics.
- VA and DoD are currently preparing search rosters for the years 2012 & 2013.
- It is expected that the search roster for 2012 & 2013 will be complete within 2-4 weeks and, barring unforeseen delays, available for use within 6-8 months.
- The preliminary 2012-2013 search roster includes information on ~35-40 million individuals.
- This year's search roster has been expanded to include:
 - Those who separated from service between January 1, 2012 – December 31, 2013
 - Those who used VHA services in FY2012 or FY2013.
 - ~3.1 million Vietnam Veterans
 - *all other known Veteran decedents, 1979-2013

Requesting Access

- By agreement with CDC and VA/DoD charter, access to data is available to all VA- and DoD-affiliated investigators.
- Requests for use of data from the SDR are reviewed by a 14 member joint Board of Governance
- In addition to the 14 members, the Board of Governance includes DoD and VA Co-Chairs (Ms. Jacki Garrick, Director of the Defense Suicide Prevention Office (DSPO) and Dr. Caitlin Thompson, Deputy Director, VA Suicide Prevention Program), Co-Coordinators (Mr. Chris Dorr (DSPO) and Dr. Robert Bossarte).
- Requests are reviewed each quarter and applications must be submitted within two weeks of each meeting date.
- The BoG does not conduct scientific review, but is responsible for ensuring that all required forms have been submitted, that standards for data use are maintained and that all users meet requirements for access.
- The BoG may also review proposals to identify overlap with program objectives or duplication of previously-approved projects.

Types of Access

- The Charter authorizes three categories of use for data obtained from NDI.
 1. Exempt – Exempt projects do not require access to identified data. Exempt requests can be reviewed and approved by the Co-Chairs.
 2. Expedited – Expedited projects are efforts conducted in support of program operations or evaluation. Expedited projects are reviewed by the Co-Chairs and Co-Coordination and require a letter of support from a program lead (i.e. SES or flag rank officer).
 3. Full – Projects requiring full review from the Board of Governance include all research projects requiring access to identifying information. Projects requiring full review must be accompanied by evidence of IRB and R&D approval.

SDR Request Process

Request Process



NDI Request form
(OMB No. 0920-0215)

Staff coordinates on
any issues

BoG adjudicates
quarterly

DD Form 2875
required for DMDC
account

Contact: robert.bossarte@va.gov or shanna.smith@va.gov

Special Considerations

- Special consideration is required for projects:
 - Intending to link data from the SDR to an existing registry
 - Participation from non-VA or non-DoD investigators
 - Use of third-party data sources
 - Sharing of information beyond VA firewalls
 - Data that will be retained for more than five years

Data Use Guidelines

- ✓ Data must be kept in DoD/VA custody
 - Study must be done by a DoD/VA organization
 - Data may never be provided to a third party
- ✓ Primary Investigator (PI) Signature
- ✓ Data Steward designation (and signature)
- ✓ Institution Review Board Determination
- ✓ Physical, Technical, and Administrative controls



Veteran Integrated Epidemiology Web-Based Resource (VIEWR): Introduction and Overview

Background

- VIEWR was developed as an integrated resource and comprehensive mechanism for accessing and analyzing data on the characteristics and health outcomes among OEF/OIF/OND Veterans.
- The main objective of the VIEWR project was to develop a comprehensive platform for monitoring the incidence and prevalence of war-related injuries and illnesses.
- VIEWR includes basic demographic information on all Veterans included in the OEF/OIF/OND Roster.
- VIEWR includes clinical and diagnostic information on all OEF/OIF/OND Veterans who used VHA services.

Populations

- Currently, data are available for:
 - All OEF/OIF/OND Veterans on the OEF/OIF/OND Roster
 - All OEF/OIF/OND Veterans who used VHA services
 - Registries were included for subsets of VHA users
 - Veterans diagnosed with Traumatic Brain Injury Registry
 - Veterans diagnosed with a mental health condition
 - Veterans diagnosed with an infectious disease
 - All female Veterans
 - Veterans with Polytrauma

Analytic Capabilities

- VIEWR enables users to
 - Generate frequency distributions and crosstabs of basic demographic and service information on all Veterans included in the OEF/OIF/OND Roster.
 - Analyze health care utilization at the Veteran or encounter (visit) level.
 - Generate frequency distributions and crosstabs of specific conditions or procedures aggregated by basic demographic and service information.
 - Perform chi-square analysis to test for significant differences between two independent groups.

Security

- The website is housed on a VA approved server.
- New users are approved by the VA before they can access the website.
- No demographic or health care data can be downloaded by users.
- No personal identifiers are included on the analytic file.
- The site will not allow users to print or download analytic results.

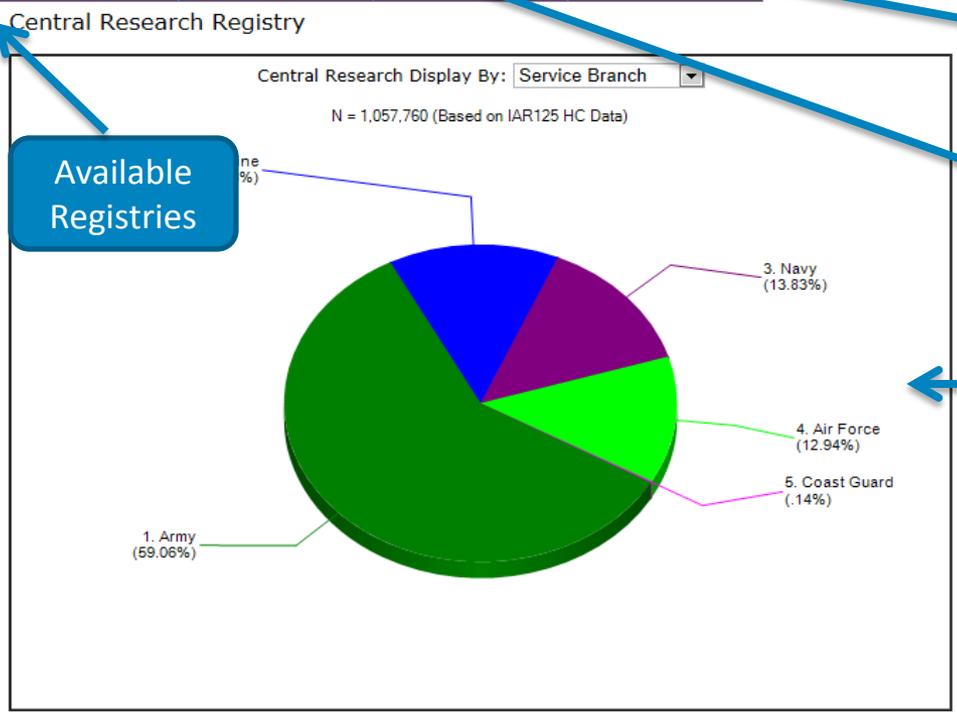


UNITED STATES DEPARTMENT OF VETERANS AFFAIRS

OIF/OEF/OND Related Illness and Injury Registries and Health Surveillance System

Home	FAQ	Help	Contact Us	My Profile	Log Off
Central Research	Registry Home	Std. Report	Ad Hoc - Roster	Ad Hoc - HC	Ad Hoc - PTSD
TBI	Chi-Square - Roster	Chi-Square - HC	My Report	Data Dictionary	

- Polytrauma
- Mental Health
- Infectious Disease
- Women's Health



Available Registries

Ability to develop personalized reports

Link to standard quarterly reports

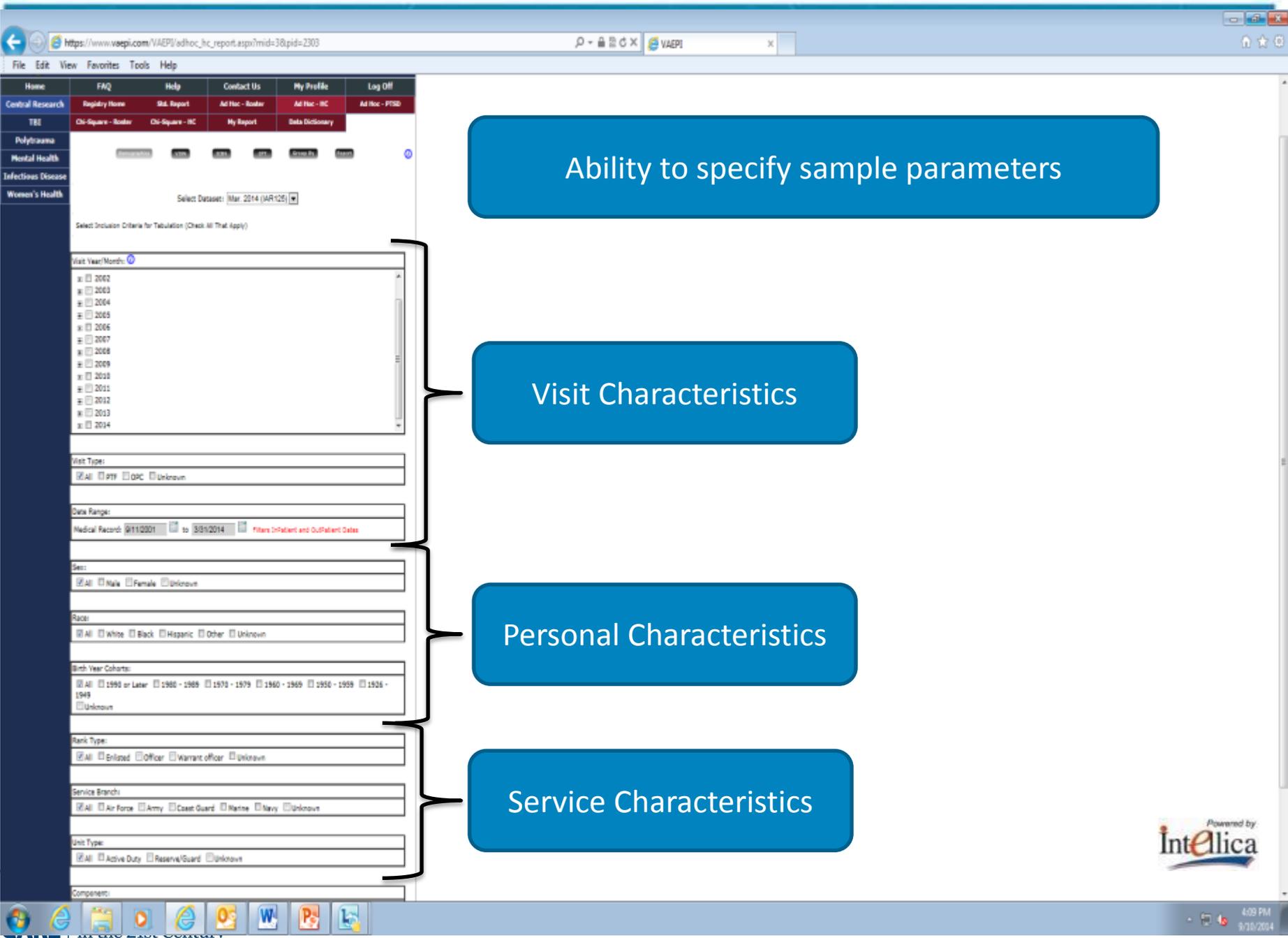
Quick view of service and personal characteristics

Secure Site
https://www.vaepi.com/VAEPI/home_user.aspx

The central research registry is designed to facilitate research by the Environmental Epidemiology Service (EES). As the office of primary responsibility for the surveillance system, the EES has unique requirements to produce periodic reports for senior leadership, conduct just in time analysis and reporting, and manage the overall research efforts across all registries.

Select: May. 2014 (IAR127)





Select Dataset: Mar 2014 (AR125)

Select Inclusion Criteria for Tabulation (Check All That Apply)

Visit Year/Month:
 2002
 2003
 2004
 2005
 2006
 2007
 2008
 2009
 2010
 2011
 2012
 2013
 2014

Visit Type:
 All PTF OPC Unknown

Date Range:
Medical Record: to

Sex:
 All Male Female Unknown

Race:
 All White Black Hispanic Other Unknown

Birth Year Cohort:
 All 1990 or Later 1980 - 1989 1970 - 1979 1960 - 1969 1950 - 1959 1940 - 1949
 Unknown

Rank Type:
 All Enlisted Officer Warrant officer Unknown

Service Branch:
 All Air Force Army Coast Guard Marine Navy Unknown

Unit Type:
 All Active Duty Reserve/Guard Unknown

Component:

Ability to specify sample parameters

Visit Characteristics

Personal Characteristics

Service Characteristics

https://www.vaepi.com/VAEPi/adhoc_hc_report.aspx?mid=38&pid=2203

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Polytrauma
Mental Health
Infectious Disease
Women's Health

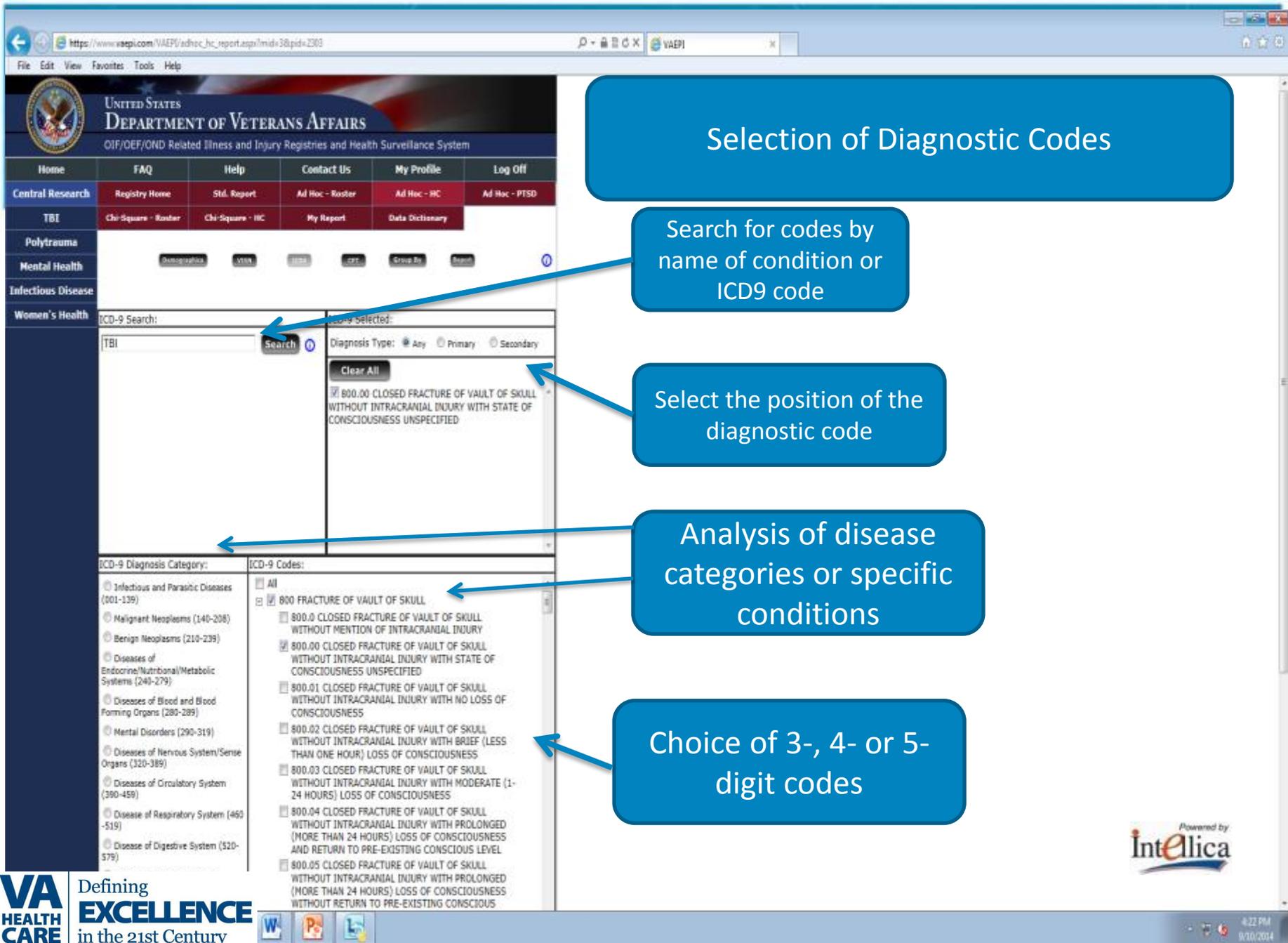
Demographics VISN ICD9 CPT Group By Report

VISN/Clinic: 0

- All
- VISN 1 - VA New England Healthcare System
 - VA Medical Center (TOGUS, ME)
 - VA Medical Center (WHITE RIVER JCT, VT)
 - VA Medical Center (BEDFORD, MA)
 - VA Medical Center (BOSTON, MA)
 - VA Medical Center (MANCHESTER, NH)
 - VA Medical Center (LEEDS, MA (NORTHAMPTON))
 - VA Medical Center (PROVIDENCE, RI)
 - VA Medical Center (WEST HAVEN, CT)
 - Unknown Facility
- VISN 2 - VA Healthcare Network Upstate New York
- VISN 3 - VA New York/New Jersey Healthcare System
- VISN 4 - VA Stars & Stripes Healthcare System
- VISN 5 - VA Capital Health Care System
- VISN 6 - VA Mid-Atlantic Healthcare System
- VISN 7 - VA Atlanta Network
- VISN 8 - VA Sunshine Healthcare Network
- VISN 9 - VA Mid-South Healthcare Network
- VISN 10 - VA Healthcare System of Ohio
- VISN 11 - Veterans in Partnership Healthcare Network
- VISN 12 - VA Great Lakes Health Care System
- VISN 15 - VA Heartland Network
- VISN 16 - South Central VA Health Care Network

Reports can be generated for all VA facilities or selected VISNs

Drill down can be expanded to include more facilities



Selection of Diagnostic Codes

Search for codes by name of condition or ICD9 code

Select the position of the diagnostic code

Analysis of disease categories or specific conditions

Choice of 3-, 4- or 5-digit codes

Procedure code selection and drill down is similar to ICD9 process

Search using a specific procedure or a procedure code

Can perform analysis using general categories or specific codes

UNITED STATES DEPARTMENT OF VETERANS AFFAIRS
OIF/OEF/OND Related Illness and Injury Registries and Health Surveillance System

Home | FAQ | Help | Contact Us | My Profile | Log Off

Central Research | Registry Home | Std. Report | Ad Hoc - Roster | Ad Hoc - HC | Ad Hoc - PTSD

TBI | Chi-Square - Roster | Chi-Square - HC | My Report | Data Dictionary

Polytrauma | Mental Health | Infectious Disease | Women's Health

Demographics | VISN | ICD9 | CPT | Group By | Report

Display Type	Group By	
	Frequency by Patient	Frequency by Encounter
<input checked="" type="checkbox"/> Count	<input type="checkbox"/> Visit Year <input type="checkbox"/> Visit Year/Month <input type="checkbox"/> Visit Type <input type="checkbox"/> Sex <input type="checkbox"/> Race <input type="checkbox"/> Birth Year Cohort <input type="checkbox"/> Rank <input type="checkbox"/> Service Branch <input type="checkbox"/> Unit <input type="checkbox"/> Component <input type="checkbox"/> VISN <input type="checkbox"/> VISN/Clinic <input type="checkbox"/> ICD9 Code <input type="checkbox"/> CPT Code	<input type="checkbox"/> Visit Year <input type="checkbox"/> Visit Year/Month <input type="checkbox"/> Visit Type <input type="checkbox"/> Sex <input type="checkbox"/> Race <input type="checkbox"/> Birth Year Cohort <input type="checkbox"/> Rank <input type="checkbox"/> Service Branch <input type="checkbox"/> Unit <input type="checkbox"/> Component <input type="checkbox"/> VISN <input type="checkbox"/> VISN/Clinic <input type="checkbox"/> ICD9 Code <input type="checkbox"/> CPT Code
	Order By	

Demographics | VISN | ICD9 | CPT | Group By | Report

Frequency distribution can be on Veteran or visit level

Findings can be aggregated by up to two variables

https://www.vaepf.com/VAEPF/adhoc_bc_report.aspx?mid=38&pid=2303&ids=9¶ms=1101760&type=run

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Polytrauma | Mental Health | Infectious Disease | Women's Health

Demographics | ICD9 | ICD10 | CPT | Group By | Report

Report Options:
Name: TEMP - ADHOC HC 2014-08- [Save] [0]
(Saved Reports Located In 'My Report' Tab)

Export Options:
Print | Save | [0]

Report Parameters:

DATASET:	IAR 122
VISIT DATE RANGE - START:	8/11/2001
VISIT DATE RANGE - END:	12/31/2013
ICD9 DIAGNOSIS TYPE:	Any
SUBCATEGORY:	800 FRACTURE OF VAULT OF SKULL 801 FRACTURE OF BASE OF SKULL
ICD9 CODE:	310.2
GROUP BY:	ICD9 (Frequency By Patient)

Frequency By Single Variable

ICD9	Frequency
POSTCONCUSSION SYNDROME 310.2	15,382
FRACTURE OF VAULT OF SKULL 800	137
FRACTURE OF BASE OF SKULL 801	180
TOTAL Distinct	15,652

Frequency By Variable Combination

ICD9 Combination	Frequency
800, 801	*
310.2, 800	24
310.2, 801	21
310.2, 800, 801	*

* To protect the privacy of Veterans, frequencies of fewer than 10 individuals are not reported.
† Veterans can have multiple diagnoses with each healthcare encounter. However, a veteran is counted only once in any single diagnostic category but can be counted in multiple categories.

Demographics | ICD9 | ICD10 | CPT | Group By | Report

Powered by Intellica
Version: 1.2.0.0

Analytic Capabilities

Report results are stored in a personal folder

Data parameters are listed

Frequency within variable and Across variables

Combination counts for up to five variables



Population Rosters

Vietnam Veteran Roster

- Computerized data file of 3,055,651 military personnel who served in Vietnam.
- Data obtained from the Department of Defense, Defense Manpower Data Center (DoD/DMDC), States, BIRLS.
- Data elements include SSN, Name, DOB, Race, Sex, MOSC, Branch of Service, Rank, and Military Service Dates.
- In FY 13 using a sample of Roster Veterans and military records from NPRC to validate in-country Vietnam service, it is estimated that over 90% of Roster veterans served 'in-country' in Vietnam.
- Vital status and cause of death data through 2012 is currently being collected.

Gulf War Veteran Roster

- Computerized data file of 621,901 Operation Desert Shield and Operation Desert Storm Veterans deployed to the Kuwaiti Theater of Operations 1990-1991.
- Computerized data file of 746,247 non-deployed Veterans – comparison sample population of half of those who served during the same period
- Data elements include demographic variables and military service characteristics
- Historically served as the basis for mortality and morbidity studies
- Vital status and cause of death data through 2012 is currently being collected

OEF/OIF/OND Roster File

- Defense Management Data Center (DMDC) provides monthly roster files
 - Active Duty: personnel who separated from the military
 - Reserve/Guard: personnel who returned from their first deployment to OEF/OIF and who were not currently redeployed
- Each quarter, Veterans identified in the cumulative roster file are matched to each fiscal year outpatient (OPC) and inpatient (PTF) records (2002 – present). HC records of OEF/OIF/OND Veterans are extracted and retained in a cumulative HC file.
- Miscellaneous data files used in processing the DMDC roster file
 - Death File: received on a monthly basis from the Compensation and Pension office in VBA; name, SSN, date of death are extracted and merged onto the monthly roster file.
 - The Readjustment Counseling Services provides the number of OEF/OIF/OND Veterans treated in Vet Centers; no personal identifiers are received. This file is used in the processing of the quarterly PTSD report.

OEF/OIF/OND Roster File

- File Distribution
 - Roster File
 - Veterans Benefits Administration (monthly file)
 - Provided to external researchers upon request and after approval
 - Shared with other departments within the VA
 - Health Care File
 - Provided to external researchers upon request and after approval
 - Used to generate responses to FOIAs
 - Shared with other departments within the VA (i.e. OPP)
- Reports are developed from the combined DMDC roster file and health care utilization files.
 - They are generated and distributed each quarter.
 - The overall, PTSD, and TBI reports have been compiled since the beginning of the surveillance period (FY2002).
 - Others in response to various VA interest groups' (internal) ad hoc requests for tailored quarterly reports.

OEF/OIF/OND Roster File

- **Overall Health Care Utilization Report:** cumulative overview of the demographic and service characteristics of OEF/OIF/OND Veterans eligible for VA health services and the demographic, service and health care characteristics of those utilizing health care services; Congressionally mandated
- **PTSD:** Provides counts of Veterans receiving PTSD services at VAMCs (inpatient and outpatient) and at Vet Centers.
- **Web Reports:** Condensed versions of the total health care utilization and PTSD reports posted on the Epidemiology Program website for public use.
- **TBI:** A summary of the ICD-9-CM codes used to identify potential cases of TBI.
- **Special Requests and Report Distribution (all are based on figures in the total utilization report)**
 - **Women's Health:** utilization among men and women separately
 - **10P5 Action Group**
 - Transition: utilization within each component (Active Duty, Reserve, National Guard)
 - Transition by sex: utilization within each component among men and women separately
 - Component: utilization among Active Duty and Reserve/Guard and aggregated by state
 - State: Frequency of state of residence for VA health care eligibles and users
 - **National Mental Health Director:** utilization among Native American Veterans
 - **Blind Veterans Association:** frequency of specific eye disorders and procedures.
 - **VISN 3 Medical Director:** overview of health care utilization within VISN 3
 - **Office of Program Coordination**
 - **Persian Gulf Registry Physician**

OEF/OIF/OND Roster File

- Requests for research access can be made through DART
- <http://vaww.vhadatportal.med.va.gov/DataAccess/DARTRequestProcess.aspx>
- Available at this site are
 - DUA template
 - Instructions
 - Contact: Aaron.Schneiderman@va.gov
- Contact for Operations use
 - Erick.Ishii@va.gov



Studies

Army Chemical Corps (ACC) Vietnam-Era Veterans Health Study 2012-13

Research Objective:

To examine the prevalence of hypertension and COPD in ACC Vietnam Veterans who sprayed or maintained herbicides during the Vietnam War.

Study Design:

- 4,268 Vietnam-era Veterans – served between July 4, 1965 and March 28, 1973
- Three phases - April 2012 through September 30, 2013
 - Phase 1: Health questionnaire (mail/CATI)
 - Phase 2: Medical records collection and abstraction
 - Phase 3: In-home visit (BP, anthropometrics, spirometry)

Response:

- Phase 1: 79.1% of 4,217 eligible Veterans
- Phase 2: 92.9% of 1,067 medical record consents received
- Phase 3: 63.9% of 765 selected to participate

Current status: Data analysis is underway.

Gulf War Follow-up Study Background

- Research question: Is the health of Veterans who deployed to the 1991 Gulf War better, worse or the same as those who did not deploy.
 - Health includes several domains: physical (such as neurologic, immunologic and respiratory), mental, women's health, functional, and social
- Provide a population-level assessment of overall health and wellness of Gulf War and Gulf-Era Veterans over time.
- Permanent population based panel surveyed in 1995, 2005, and 2013 (mail, telephone and Web)

Gulf War Follow-up Study Methods

- Population based sample of 15,000 Gulf War Veterans (deployed) and 15,000 Gulf War-era Veterans (non-deployed)
- Sampled from the known population of 696,000 Gulf War veterans and 803,000 Gulf War-era Veterans (50% of the total known non-deployed veterans during this time period)

Unit Component	Male	Female	Total
Active	4,800	1,200	6,000
Reserve	4,000	1,000	5,000
Guard	3,200	800	4,000
Total	12,000	3,000	15,000

Gulf War Follow-up Study Results

- 1995 study
 - Gulf War Veterans reported higher prevalence of
 - functional Impairment ,
 - healthcare utilization,
 - serious chronic health conditions,
 - wide variety of symptoms,
 - miscarriage (Female Veterans and female partners of male Veterans)
 - Birth defects among live born infants (Female Veterans and female partners of male Veterans)

Kang et al, 2000 (JOEM)

Gulf War Follow-up Study Results

- 2005 Survey
 - Gulf War Veterans continued to report significantly higher prevalence of many adverse health outcomes compared with Gulf-era Veterans including:
 - Unexplained multi-symptom illness
 - Chronic fatigue-like illness
 - Posttraumatic stress disorder
 - Functional impairment
 - Health care utilization
 - Majority of selected physical and mental conditions

Kang et al, 2009 (JOEM)

Gulf Era Twin Registry (GETR)

Research Objective:

To develop a twin registry for OEF OIF Veterans to facilitate twin research in the newest cohort of Veterans.

Study Design:

A multimodal survey using web-based, postal and telephone interviews will be used to introduce the registry, invite participation, and gather baseline data on twin characteristics, demographics and physical and psychological health.

An estimated 6000 twin pairs identified by DoD, Naval Health Research Center who have separated since 2002.

Goal is to extend twin registrants to include Veterans who served in the 1990s.

Current Status:

Currently in the field for data collection.

New Generation Study I

Research Objective

To assess the health status of OEF OIF era deployed and non-deployed Veterans comparing chronic medical conditions, PTSD and other psychological conditions, general health perceptions and functional status.

Study Design

A multimodal survey using web-based, postal and telephone interviews to collect data from a sample of 30,000 deployed and 30,000 non-deployed Veterans.

Field period 2009-2011. Response rate 34.3% (49% Web; 45% Paper; 6% CATI)

Current Status

Manuscripts published on methods, infertility, respiratory conditions, PTSD, CAM

Pending publications on risky driving behavior, respiratory exposures and health, and military sexual trauma

Analyses ongoing.

New Generation Study II

Research Objective

Follow-up of OEF OIF era Veterans deployed and non-deployed Veterans to assess chronic medical conditions, PTSD and other psychological conditions, general health perceptions and functional status.

Study Design

A multimodal survey using web-based, postal and telephone interviews to collect data from original sample of 30,000 deployed and 30,000 non-deployed Veterans. Sample will be augmented with 20,000 who served after 2008. Study will include an exam component to collect clinical data.

Current Status

Instrumentation under development.

Conclusion

www.publichealth.va.gov/epidemiology/

Questions?

Contact Information

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BACKUP SLIDES

Studies of Vietnam Veterans: Army Chemical Corps Study

- **Cohort of Army Chemical Corps (ACC) Vietnam Veterans deployed and non-deployed defined in the mid 1980s - early 1990s (Service between 1965 and 1973)**
- **Key findings from previous ACC health and mortality studies**
 - Serum Study demonstrated sprayers had higher TCDD concentrations (Kang, 2001)
 - Increased risk for Vietnam deployed sprayers to develop diabetes, heart disease, chronic respiratory disease and hypertension (Kang, 2006)
 - Recent mortality study showed increased risk for chronic obstructive pulmonary disease among Vietnam deployed (Cypel & Kang, 2010)
- **IOM has recommended continued study of the VA Army Chemical Corps cohort**
- **Secretary Shinseki requested this study specifically address questions related to hypertension and chronic obstructive pulmonary disease (COPD)**

Studies of Gulf War Veterans: Gulf War Neurological Mortality Study

- Follows the entire population of GW deployed (n=621, 902) and a comparison group of non-deployed (n=746,248)
- Focuses on four neurological causes of death
 - Multiple Sclerosis
 - Brain cancer
 - Amyotrophic Lateral Sclerosis
 - Parkinson's Disease
- Initial study followed mortality through 2005
- Present study will examine mortality through 2008
- New contract awarded to continue through 2011
 - Adds OEF/OIF neurological mortality

Studies of Gulf War Veterans: Gulf War Neurological Mortality Study

- Previous Findings
 - No increased risk of death due to MS, Parkinson’s Disease, ALS, or brain cancer among deployed
 - GW deployed w/2+ days of potential nerve agent exposure (Khamisiyah) or oil well fire smoke had increased risk of brain cancer
- Methods
 - Vital status ascertainment
 - Cause of death from CDC/NCHS/National Death Index
 - Locate next of kin and request consent
 - Medical record review and confirmation by neurologist
 - Compare between deployed and non-deployed & to US population

Studies of OEF/OIF/OND Veterans

- **National Health Study for a New Generation of US Veterans**
- **OEF/OIF/OND Quarterly Healthcare Utilization Reports**
- **Veterans TBI Health Registry (under PL 110-181 Sec 1704(d))**
- **Gulf Era Twin Registry (GETR)**
- **Mortality Studies**
 - All Cause Mortality Study
 - Suicide Study
 - Motor Vehicle Crash Study

National Health Study for a New Generation of US Veterans

- Cohort of 30,000 OEF/OIF deployed and 30,000 non-deployed served OEF /OIF through June 2008
- Oversampled women
- Survey of health, exposures, & functional status
- Web-based and paper survey; Computer Assisted Telephone Interviews (CATI)
- Surveyed in 2009-2010

National Health Study for a New Generation of US Veterans

- Methods
 - Combined use of Web, and postal, and CATI methods
 - Office of Management and Budget recommended pilot test of monetary incentive
 - Compared no payment, immediate payment, promised payment
 - Demonstrated effectiveness of small cash incentive up front to increase response rate

Coughlin S et al. 2011 The effectiveness of a monetary incentive on response rates in a survey of recent U.S. veterans. Survey Practice.

New Generation Study

- Background/Methods
 - PTSD: PTSD Checklist (PCL-17), a cut-off score of 50
 - TBI: Measured by the Department of Veterans Affairs TBI Clinical Screener (endorsement of a series of items that trigger referral for clinical evaluation)
 - Chronic medical conditions
 - Health care utilization
 - Environmental exposures & Combat exposures
 - Medical Outcome Study SF 12
 - PHQ9
 - Behavioral health risk factors (smoking, drinking, driving)
 - Women's health specific items (reprod. health, gyn. outcomes)

National Health Study for a New Generation of US Veterans

- Preliminary findings:
 - Response rate 34.3% (49% Web; 45% Paper; 6% CATI)
 - Approximately 55% responders deployed; Women comprised 21.4% of response

Eber S, et al. 2013. The National Health Study for a New Generation of United States Veterans: methods for a large-scale study on the health of recent veterans. *MilMed* 178(9):966-969.