



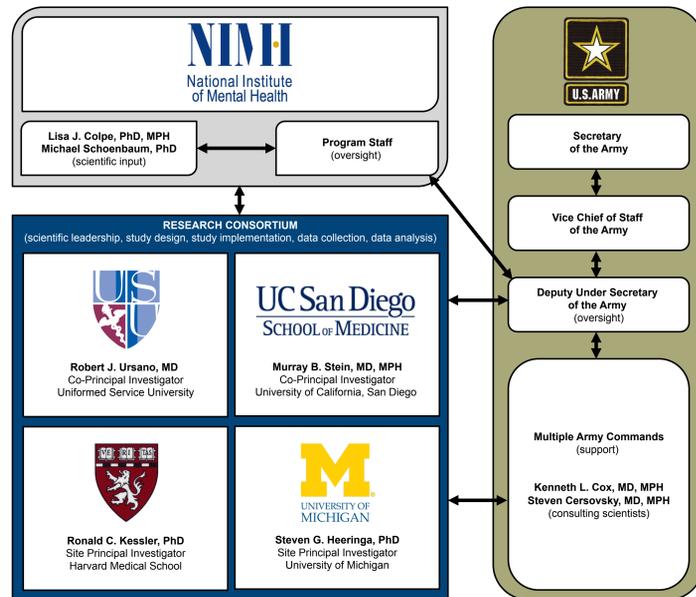
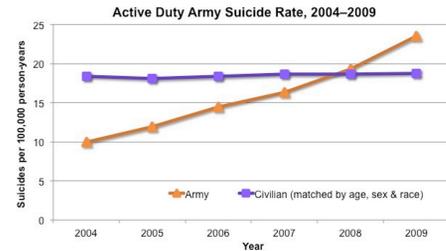
Overview of the Army Study to Assess Risk and Resilience in Servicemembers (Army STARRS)



James A. Naifeh,¹ Catherine L. Dempsey,¹ Carol S. Fullerton,¹ David M. Benedek,¹ Steven Heeringa,² Ronald C. Kessler,³ Murray B. Stein,⁴ Matthew K. Nock,⁵ Kenneth L. Cox,⁶ Lisa J. Colpe,⁷ Michael Schoenbaum,⁷ & Robert J. Ursano¹
¹Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences; ²University of Michigan; ³Harvard Medical School; ⁴University of California, San Diego; ⁵Harvard University; ⁶U.S. Army Public Health Command; ⁷National Institute of Mental Health

Background

- U.S. Army suicide rates were historically lower than those of the U.S. general population, adjusting for demographic differences
- The suicide rate among Soldiers began rising in 2004 and has exceeded the adjusted civilian rate since 2008
- The Army engaged the National Institute of Mental Health (NIMH) for help in addressing this issue
- Army STARRS is a direct response to the Army's request that NIMH enlist the most promising scientific approaches to better understand psychological resilience, mental health, and risk for self-harm among Soldiers
- Army STARRS was supported under a 5-year NIMH Cooperative Agreement (U01)* mechanism, providing for substantive NIMH involvement in the execution of the study and the inclusion of Army scientists as partners
- The consortium brings together an internationally known, interdisciplinary team of researchers with expertise in military health, psychiatric epidemiology, survey methodology, genetics & neurobiology, and suicidal behaviors



New Soldier Study (NSS)

- Survey of new Soldiers as they enter Reception Week at Ft. Jackson, Ft. Benning, & Ft. Leonard Wood
- Instruments: Computerized self-administered questionnaire (SAQ) & neurocognitive tests, blood collection

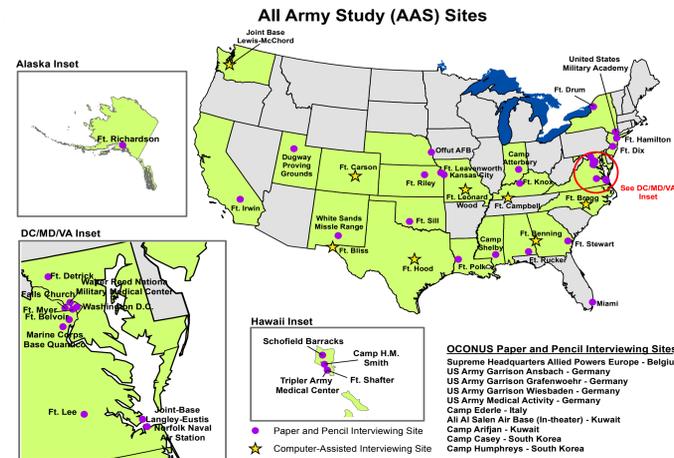


- ### Neurocognitive tests
1. Continuous perf.
 2. N-back
 3. Go no-go
 4. Emotional Stroop
 5. Conditional excl.
 6. Facial memory
 7. Emotional ID
 8. Sensorimotor proc.

- Data collected February 2011 to November 2012
- Blood collected September 2011 to November 2012
- ~57,000 Soldiers attended survey sessions
- ~35,000 Soldiers gave blood (80% of those asked)

All Army Study (AAS)

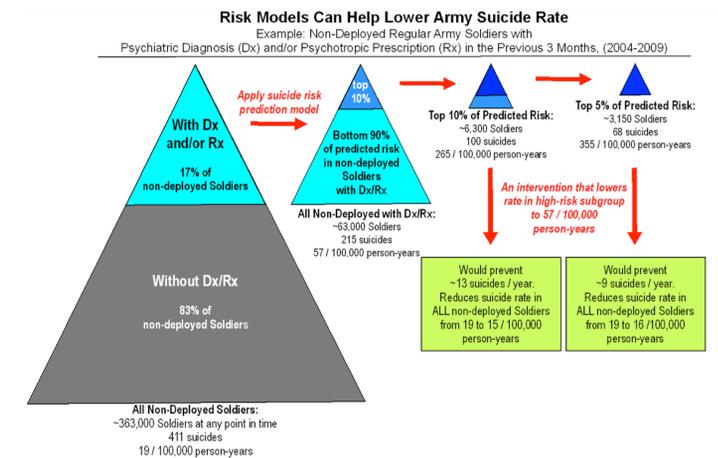
- Representative cross-sectional survey of active duty Soldiers (including activated Army Reserve and Army National Guard) inside and outside the continental U.S., including in-theater (Kuwait)**
- Instruments: Computerized or paper-and-pencil SAQ
- Data collected January 2011 to April 2013
- ~35,000 Soldiers attended CONUS & OCONUS survey sessions; ~10,000 attended sessions in-theater



Special Studies

1. Pre-Post Deployment Study (PPDS)
 - Prospective, multi-wave panel examining suicidality and mental health following combat deployment
 - Instruments: Computerized and paper-and-pencil SAQs, blood collection
 - Data collected January 2012 to April 2014
 - Pre-deployment participants: ~9,500 Soldiers (~8,000 Soldiers gave blood)
 - Post-deployment participants: ~10,000 Soldiers at 1 month; ~9,200 at 3 months; ~6,200 at 9 months
2. Clinical Reappraisal Study (CRS)
 - In-depth clinical interviews with Soldiers to examine the diagnostic accuracy of Army STARRS SAQs
 - Instruments: Telephone-administered diagnostic interview (Structured Clinical Interview for DSM-IV)
 - Data collected March 2012 to November 2012
 - ~460 Soldiers participated

Conceptual Framework: Concentration of Risk



Security, Confidentiality, & Safety

- Army STARRS data are stored in a secure, Army-approved data enclave at the University of Michigan
- Blood samples are stored in a secure, Army-approved biorepository at Rutgers University
- Privacy is a top priority in every study component
- Participants' answers were never shared with anyone in the Army unless the Soldier indicated imminent danger of self-harm or harming someone else
- When imminent danger was indicated, Army Chaplains were notified within 24 hours
- All participants were given a wallet-sized Safety Resource Card with various behavioral health resources
- Army Chaplains were on call during each interview session to provide immediate help
- Participants could request a confidential follow-up appointment with an Army Chaplain

Components

- Army STARRS has five major components. Participation in all components is completely voluntary
- Instruments used in each component assess a broad range of mental health risk and resilience factors

Historical Administrative Data Study (HADS)

- Analysis of the de-identified health & administrative records of all active duty Soldiers during 2004-2009
- Includes more than 1.6 million Soldiers and more than 1.1 billion records

*Army STARRS was sponsored by the Department of the Army and funded under cooperative agreement number U01MH087981 with the U.S. Department of Health and Human Services, National Institutes of Health, National Institute of Mental Health (NIH/NIMH). The contents are solely the responsibility of the authors and do not necessarily represent the views of the Department of Health and Human Services, NIMH, Department of the Army, Department of Defense, Uniformed Services University of the Health Sciences, or Center for the Study of Traumatic Stress.
**This study was conducted under a protocol reviewed and approved by the U.S. Army Medical Research and Materiel Command Institutional Review Board, and in accordance with the approved protocol

Soldier Health Outcomes Study (SHOS)

- Two case-control studies (A & B) of Soldiers who engaged in non-fatal and fatal suicidal behavior

1. SHOS-A

- Focuses on Soldiers hospitalized for a suicide attempt at Ft. Bragg, Ft. Hood, JBLM, Ft. Stewart, & WRNMMC
- Instruments: SAQs, interviews, computerized neurocognitive tests, blood collection
- Data collected November 2011 to December 2013
- 186 cases & 375 controls participated (296 total Soldiers provided blood samples)

2. SHOS-B

- Focuses on Soldiers who died by suicide
- Instruments: Telephone interviews with the next of kin and Army supervisor of both cases (deceased) and controls (living)
- Data collected March 2012 to January 2014
- Next of kin and/or supervisors provided data for 150 cases and 276 controls

Communication

Products

- Brochures, posters, & postcards
- Website: www.ArmySTARRS.org

Traditional & Social Media

- Press releases
- Sample tweets and Facebook posts were included in the Communications Plan for installations to use with their Facebook pages and Twitter accounts

