



U.S. Army – National Institute of Mental Health
Collaborative Study of Suicidality and Mental Health in the U.S. Army
July 14, 2009

Study Summary

The “Collaborative Study of Suicidality and Mental Health in the U.S. Army” is the largest study of suicide and mental health among military personnel ever undertaken. It is a direct response to the Department of the Army’s request to the National Institute of Mental Health (NIMH) to enlist promising scientific approaches for addressing the rising suicide rate among Army Soldiers. Since 2001, the suicide rate for Soldiers has climbed, reaching record levels in 2007 and again in 2008, despite major prevention and intervention efforts by the Army over this period. The Army enlisted the NIMH as a partner because of NIMH’s public health mission and its expertise in generating innovative research approaches to better understand, prevent, and treat mental health problems. The Army and the NIMH signed a memorandum of agreement in October 2008 that authorized NIMH to solicit research proposals from the scientific community, select the most meritorious application following peer review, and undertake the investigation with Army funding.

The purpose of the collaborative study is to identify, as rapidly as scientifically possible, modifiable risk and protective factors and moderators of suicidal behavior, to help inform the Army’s ongoing efforts to prevent suicide and improve Soldiers’ overall psychological health and functioning. To do this, investigators will conduct an epidemiologic study of mental health, psychological resilience, suicide risk, suicide-related behaviors, and suicide deaths in the Army. This study will evaluate representative samples of Soldiers across all phases of Army service, both retrospectively and prospectively.

The study will use several strategies to generate information on risk and protective factors for suicidal behavior and other mental health problems:

- The Army holds very detailed information on Soldiers’ characteristics and experiences. Study investigators will work in partnership with the Army and NIMH scientists to make maximum use of existing Army data sources to identify possible risk and protective factors for suicidal behavior. Information gained from this effort will be applied to inform Army’s prevention and intervention efforts. These data will contribute to both retrospective and prospective analyses.
- Investigators will undertake a retrospective case-control study, comparing Soldiers with suicidal behavior (cases) with similar Soldiers without suicidal behavior (controls), in order

to identify characteristics, events, experiences, and exposures that are predictive of Soldiers having negative (or positive) outcomes.

- Investigators will select a representative sample of approximately 90,000 active duty Soldiers (including mobilized Reserve Component and National Guard Soldiers), from whom they will collect very detailed information on psychological and physical health, exposure to adverse events, attitudes, social support, leadership and unit climate, training and knowledge, employment and economic status, family history, and other potentially relevant domains. Biological specimens (e.g., saliva and/or blood) will also be collected for genetic and neurobiological studies. Investigators will analyze the initial, cross-sectional data obtained from Soldiers to identify the distribution of potentially relevant risk and protective factors, based on the findings from the retrospective/historical analysis and from other sources.
- In addition to the representative sample drawn from the whole Army, investigators will seek parallel information from all new recruits entering the Army in each of the first three years of the study (estimated to be 80,000 to 120,000 per year).
- Investigators will follow all study participants prospectively over the course of the study period, via Army data sources and by conducting follow-up surveys on a targeted basis. This will provide very rich longitudinal information relating Soldiers' characteristics and experiences to subsequent psychological health, suicidal behavior, and other relevant outcomes. The study will focus particularly on periods in a military career that are known to be high-risk, including shortly before and after deployment, during deployment, and shortly after discharge.

The retrospective components of the study design make it possible to begin generating information on risk and protective factors—and how to determine who is at high risk—very rapidly. Study investigators will move quickly to produce actionable information that the Army can use to develop and refine interventions to prevent future suicides and address associated related psychological health issues. With each successive round of data collection from the prospective component of the study, investigators will update and extend these recommendations as they make new findings. The study is scheduled to last five years.

Groundbreaking Nature of the Research

This study is unprecedented in both scope and scale. Virtually all prior studies of suicidal behavior – whether in civilian or military populations – have been limited by the fact that suicide is a relatively rare event (in statistical terms; for instance, there were 115 confirmed suicide deaths among Army Soldiers in 2007, a rate of 18.1/100,000 soldiers). Thus, very large samples are required for valid scientific analysis, which this study will provide. The study is also designed to examine outcomes beyond suicidal death, such as suicide attempts, suicidal ideation, and various psychological health problems, which are both proximate risk factors for suicide and outcomes of interest in their own right.

Similarly, suicide is a complex phenomenon, and suicidal behavior is likely to be a function of multiple, interrelated risk and protective factors. Thus, for instance, there are few or no specific factors that are common to all suicides; and, even for known risk factors such as clinical depression or failed interpersonal relationships, the vast majority of Soldiers who experience such factors never have suicidal behavior. By collecting very rich data from Soldiers directly, linked with detailed data from Army administrative sources (with all necessary legal and confidentiality protections), this study will support more detailed investigation of modifiable risk and protective factors than has been possible before.

Finally, this study is groundbreaking in its emphasis on developing practical, actionable information to guide the development and refinement of suicide risk reduction efforts, in and beyond the Army. Specifically, this study is designed, as rapidly as scientifically possible, to (1) identify modifiable risk and protective factors and moderators of suicidality; (2) advance hypotheses about mediators of suicidality that can be acted upon to reduce risk and/or increase protection; and (3) identify specific intervention options for reducing suicide risk by addressing empirically-identified risk and protective factors.

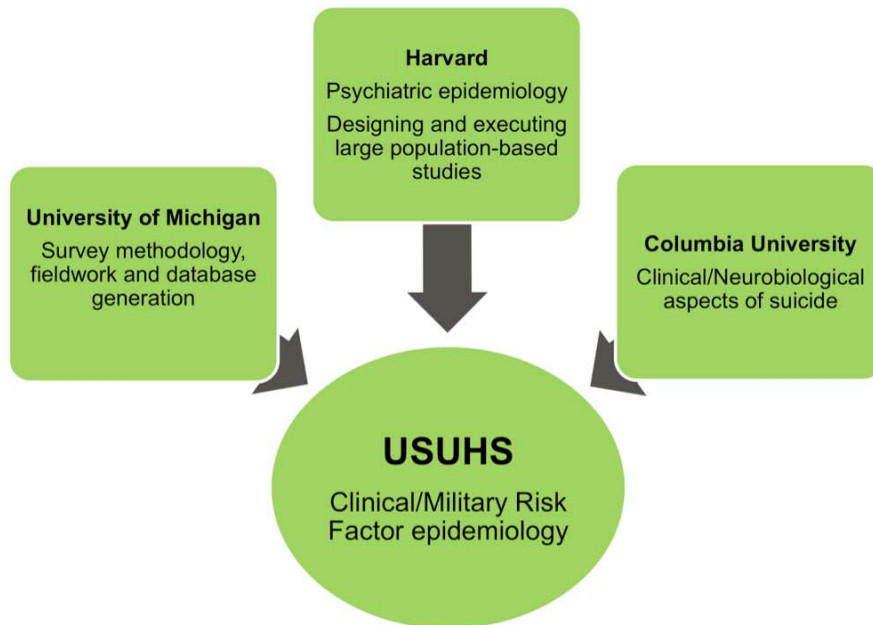
Study Team

The consortium carrying out the study is an interdisciplinary team of four leading academic research institutions: the Uniformed Services University of the Health Sciences (USUHS), Harvard University, the University of Michigan, and Columbia University. This research team brings together international leaders in the fields of military health, health and behavior surveys, epidemiology, and suicide, including genetic and neurobiological factors involved in suicidal behavior.

The Project Director and overall Principal Investigator of the study, Robert Ursano, M.D., is at the Uniformed Services University of the Health Sciences, Bethesda, MD. The consortium's other Principal Investigators are Steven Heeringa, Ph.D., University of Michigan, Ann Arbor, MI; Ronald Kessler, Ph.D., Harvard University, Cambridge, MA; and John Mann, M.D., Columbia University, New York, NY.

The administrative and funding instrument used for this program is the cooperative agreement research grant. Under a cooperative agreement research grant, NIMH scientists support and stimulate project activities in a partnership role with the grantee. Consistent with this concept, the dominant role and prime responsibility resides with the grantee for the project as a whole, although specific tasks and activities may be shared among the grantee and collaborating scientists at the NIMH.

Consortium Expertise



Value added to the Army

This study builds on and complements many prior and ongoing Army efforts, particularly those led by the Army Suicide Prevention Task Force; on prior and going NIMH-supported research on suicidal behavior, in both civilian and military settings; as well as other work by NIMH as part of its partnership with the Army to help address suicide among Soldiers. In advance of the present study, NIMH developed a research report for Army leaders on “best practices” from civilian settings to prevent and mitigate suicide, spanning the range from early prevention and resilience-promotion efforts, to interventions based in primary care and general medical settings, to psychiatric specialty care for people who are acutely suicidal. This “best practices” report focused on feasible and practical strategies that the Army could incorporate quickly in its ongoing prevention and intervention efforts.

NIMH has collaborated extensively with several Army institutions to lay the groundwork for the Army-NIMH collaborative study. In particular, the NIMH has coordinated with the Army’s Center for Health Promotion and Preventive Medicine (CHPPM) to learn about and help inform epidemiologic surveillance of suicidal behavior, and risk factor research already underway. NIMH scientists and CHPPM have also been working closely with the Army Suicide Prevention Task Force to help identify relevant Army (and Department of Defense) data sources that may

contain relevant, but as yet unexploited, information regarding suicide risk. This work will yield a powerful tool: a rich database that will support CHPPM's surveillance and analysis efforts, the Army-NIMH study efforts to identify previously undetected risk and protective factors, and other Army initiatives intended to promote Soldiers' psychological health and functioning.

NIMH and the Army are working closely together to establish appropriate data use agreements, confidentiality and human subjects protections, and otherwise address all legal, regulatory, and ethical requirements for this study.

Additional Information

For additional information on this study, please contact:

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