

INFORMATION PAPER

Prospective Studies of U.S. Military Forces: The Millennium Cohort Study

In the report to the Committee on National Security, House of Representatives and the Armed Services Committee, U.S. Senate *on Effectiveness of Medical Research Initiatives Regarding Gulf War Illnesses*, the DoD identified the need for a coordinated capability to apply epidemiological research to determine whether deployment-related exposures are associated with post-deployment health outcomes. The Millennium Cohort Study, a prospective study of U.S. military forces, responds to this need and to recent recommendations from Congress and the Institute of Medicine to perform a study that systematically collects population-based demographic and health data to evaluate the health of service personnel throughout their military careers and after leaving military service.

- FY1999 DoD Authorization Bill language - the Secretary of Defense establish a center devoted to "...longitudinal study to evaluate data on the health conditions of members of the Armed Forces upon their return from deployment."
- FY2001 DoD Appropriations Bill language, "...longitudinal studies of military personnel before they are deployed to potentially hostile situations and after their return."
- The study and study design was recommended by the Institute of Medicine Report, *"The Gulf War Veterans: Measuring Health."*
- In the Institute of Medicine Report *"Strategies to Protect the Health of Deployed U.S. Forces,"* recommends that the Millennium Cohort Study be planned to evaluate multidimensional factors relevant to health, so that these factors can be assessed over the lifetime of the service member.

The Millennium Cohort study will enroll a stratified random sample of up to 100,000 U.S. military personnel (as of October 2000) that will be followed prospectively with surveys every 3 years over a 21-year period. The ~100,000 persons will be comprised of 30,000 veterans who have been recently deployed to Southwest Asia, Bosnia, or Kosovo, and 70,000 veterans who have not been deployed to these conflicts. In October 2004 and October 2007, ~20,000 new military personnel will be added to the cohort. The total of 140,000 veterans will be followed until the year 2022.

The study is designed to systematically collect population-based demographic and health data to evaluate the health of service personnel throughout their military careers and after leaving military service. The principal objective of the study is to evaluate the impact of military deployments on various measures of health over time, including medically unexplained symptoms and chronic diseases, such as cancer, heart disease, and diabetes. The Millennium Cohort Study will serve as a foundation upon which other routinely

captured medical and deployment data may be added to answer future questions regarding the health risks of military deployment, military occupations, and general military service.

DoD investigators include scientists from the Army, Navy, and Air Force. VA collaborates from one of the large Epidemiological Research and Information Centers. The Millennium Cohort Scientific Steering and Advisory Committee includes 12 distinguished external scientists and representatives from veteran service organizations. More information about study design and progress are found on <http://www.millenniumcohort.org>

USD(AT&L) has provided initial funding and a Defense Technology Objective has been established (MD.25). Continued funding is programmed from the DoD Program Element (PE) for Force Health Protection and Deployment Health Research, PE 0601105D.

POCs:

CDR Margaret Ryan, MC, USN, Principal Investigator, NHRC Code 25, 619-553-8097
Lt Col Roger Gibson, USAF, BSC, HA(CPP), 703-681-1703x5211