

RESEARCH PROTECTIONS UPDATE



News and Comment on the Protection of Human Subjects in Navy and Marine Corps Research

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Spotlight

The Millennium Cohort Program; A Focus on Excellence In Health Survey Studies



The Millennium Cohort Program (MCP) is comprised of the Millennium Cohort Study (MILCO), the longest running prospective military health study, and the Millennium Cohort Family Study of military spouses. DON HRPP conducted a question and answer session with the respective Principal Investigators (PIs) of these studies, Rudy Rull, Ph.D., and Valerie Stander, Ph.D., to find out more about the program.

DON HRPP Question: What is the Millennium Cohort program? Can you provide a brief summary?

PIs: The Millennium Cohort Program is comprised of both the Millennium Cohort Study and the Millennium Cohort Family Study. Both studies are DoD-sponsored projects conducted within the Center for Deployment Health Research at the Naval Health Research Center (NHRC) in San Diego, CA. The goal of the program is to provide evidence-based knowledge products to inform and improve the development of interventions, guidelines, and policies through key stakeholders including DoD and VA leadership.

The Millennium Cohort Study is the largest and longest running prospective health study in military history, and was recognized in Science Magazine as the “most rigorous study” of US service members. To date, over 200,000 enrolled participants from the Army, Navy, Air Force, Marine Corps, and Coast Guard, including Active duty, National Guard, and Reserve forces have enrolled in the Millennium Cohort Study. Participants complete surveys every 3 years regarding their mental and physical health, health behaviors, and military experiences, with follow-up planned through 2068.

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Common Rule Buzz

The Revised Common Rule; What Exactly is This New “Limited IRB Review”?

By Chidima Ioanou

Most of us are familiar with full board and expedited IRB reviews, but the revised Common Rule, which is looming upon us (general compliance date delayed to 21 January 2019) has a new requirement for certain exemption categories called limited IRB review. Before we explore this soon to be new requirement, let’s briefly recap expedited review because there might be a bit of confusion between the two. Research that is eligible for review by expedited review procedures does not need to be reviewed by the convened IRB. The IRB Chair, Vice Chairs, or an experienced delegated IRB¹ member may review either or both of the following:

- 1) Some or all the research appearing on the list (list of categories as published in a Notice in the Federal Register) and found by the reviewer to involve no more than minimal risk
- 2) Minor changes in previously approved research during the period (of one year or less) for which

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The Millennium Cohort Program, A Focus on Excellence In Survey Studies (continued from page 1)

The Millennium Cohort Study evaluates the impacts of military service, including deployments and other occupational exposures, on the long-term mental, physical, and behavioral health of our service members and veterans. The study is designed to address a wide range of topics, including psychological and behavioral health, injuries and chronic diseases, and environmental and occupational exposures. The Millennium Cohort Family Study leverages data from the Millennium Cohort Study of service members and pairs it with data from their spouses to get a more complete picture of military life and the experiences that impact the health and well-being of military families. The Family Study not only seeks to understand the consequences of deployment and other military life experiences for the spouses and children of service members, but also the effects of family life and relationships on service member readiness and performance. Family Study participants complete surveys every 3 years (concurrent with the Millennium Cohort Study) with follow-up planned through 2033.

DON HRPP Question: How was the concept of the Millennium Cohort program conceived? Can you describe the gaps in literature or the questions that needed to be answered leading to the development of the program?

Pis: The origin of the Millennium Cohort Study can be traced to the 1990s when veterans returning from the first Gulf War reported numerous health concerns. The DoD, VA, and Congress eventually identified the need for coordinated epidemiological research to determine how military occupational exposures, including deployment-related experiences, affect long-term health. The Institute of Medicine specifically indicated the need for a large, prospective study of service members that could evaluate the impacts of military service on a broad spectrum of important health outcomes. In response to these recommendations, the National Defense Authorization Act of 1999 directed the Secretary of Defense to establish a study of post-deployment health, which became the Millennium Cohort Study.

In 2007, the DoD began to recognize that the high pace of military operations in Iraq and Afghanistan were not only taking a significant toll on the well-being of service members, but also their family members. There had never been a representative study of

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PRIM&R 2018

Please join Roxana Lescano of NAMRU-6, Sophea Sout of NAMRU-2, and Derek Englis of DON HRPP at the PRIM&R 2018 Advancing Ethical Research Conference during their panel discussion on:

“Applying US Human Research Protection Regulations and Embedded Cultural Values to Research Conducted in Different Cultures: Challenges, Cultural Considerations, Collaborations, and Experiences”
(Global Research Track) (advanced) on Saturday, November 17 from 11:30-12:45 PM



Flickr.com

In this session, speakers will discuss possible strategies for HRPP staff who are tasked with ensuring compliance with US-based human research protections requirements within diverse cultures.

The Millennium Cohort Program, A Focus on Excellence In Survey Studies

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the consequences of war on the well-being of US military spouses and children. Subsequent DoD recommendations led to the initiation of the Millennium Cohort Family Study. To date, the Family Study is the only ongoing research effort designed to determine the impacts of military service on the physical health, psychological well-being, and relationship quality of service members, their spouses, and children and evaluate the influence of family readiness on service members.

DON HRPP Question: When did the MILCO study start?

PIs: The Millennium Cohort Study was launched in the summer of 2001 with an initial enrollment of over 77,000 service members. The timing of this launch was fortuitous as the cohort was established prior to the events of September 11 and the large-scale deployment of service members in response to the subsequent conflicts on Afghanistan and Iraq.

The Family Study was launched a decade later in the fall of 2011. In conjunction with the enrollment of service members into the fourth enrollment panel (cohort) of the Millennium Cohort Study, all spouses of these enrolled service members were invited to enroll in the Family Study.

DON HRPP Question: How many participants have been recruited thus far?

PIs: Currently, over 201,000 service members have been enrolled in the Millennium Cohort Study. These participants were enrolled in four separate cohorts (panels), with over 77,000 enrolled in 2001, 31,100 in 2004, 43,400 in 2007, and 50,000 in 2011. Nearly 10,000 service members enrolled in the Millennium Cohort and their spouses are enrolled as couples in the Family Study. We will launch our next survey data collection in January 2019, and plan to enroll an additional 100,000 individuals with 1-4 years of military service to participate into our fifth Millennium Cohort

Study panel as well as 50,000 military spouses into the second panel of the Family Study.

DON HRPP Question: Could you please describe your subject population?

PIs: By Service branch, almost half of Millennium Cohort Study participants are from the Army, followed by the Air Force, Navy, and Marine Corps. At enrollment, 67% were on active duty while the remaining 33% were serving in the Reserves or National Guard. Over 80% of our participants are from the enlisted ranks. Because we oversample for female service members, approximately 30% of our participants are women. Service members from racial or ethnic

minority groups comprise 30% of our participants. As of 2018, 65% of our participants have been deployed at least once. We also know that almost 70% of our participants have already separated from military service; we still continue to follow them as veterans.

Since the Family Study includes a subset of married Service members enrolled in the Millennium Cohort, the demographic characteristics of the two studies are quite similar. However, it is important to point out that Family Study participants include substantial numbers of understudied subgroups, including families led by female service members with male spouses (13%) and dual-military couples (10%). For the upcoming survey, the Family Study will invite for the first time service members who report they are single parents to share information about the well-being of their families.

DON HRPP Question: What have the results of the study shown?

PIs: The Millennium Cohort study has the unique abilities to follow service members over their lifetime, including after military separation, and to link self-reported survey data with numerous other objective military and medical data sources, thus making it possible to investigate relationships between service-related

“This wealth of data has facilitated timely research on critical issues such as PTSD, suicide, alcohol misuse, sexual trauma, women in combat, and burn pit exposure. With 100 peer-reviewed publications and over 150 presentations to-date, the Millennium Cohort Study is the most productive health study in military history.”

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The Millennium Cohort Program, A Focus on Excellence In Survey Studies

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Results from the Family Study's initial publications have shown that social support for the spouse can play a significant role in their perception of marital quality; poor communication during service member deployment can influence spouses' tobacco use and alcohol misuse; and children whose service member parent is or has deployed may have a greater likelihood of ADHD or depression.

Although it is by far the younger of the two research efforts, with more than ten new Family Study publications scheduled for release over the next year, the Millennium Cohort Program will be releasing results at an even greater pace going forward.

DON HRPP Question: As force health protection remains one of the DoD's critical priorities, have there been any policy changes or mandates as a result of this study?

PIs: On numerous health topics, findings from our studies contribute to the body of knowledge of research that informs the development of DoD policies that prevent illness and injury to service members, veterans and military families. DoD health policies that have been informed by Millennium Cohort research include:

- ◆ Substance abuse
- ◆ Sexual assault
- ◆ Mental health
- ◆ Sleep and resilience/readiness
- ◆ Service women's health
- ◆ Respiratory health
- ◆ Obesity

The Millennium Cohort Program (MCP) also contributes to the content of educational materials used in training medical and support personnel and supports direct requests for information from military leaders

on pressing military health concerns. For example, the Center for Deployment Psychology (CDP) is a tri-service training center headquartered at the Uniformed Services University of the Health Sciences (USUHS) that educates many of the health professionals that provide care to military personnel and their families. The CDP offers a number of workshop modules focused on deployment health, including marital and family issues. These are presented as a series of webinars specially designed to support clinicians who provide counseling to military personnel and their families. The CDP has previously integrated outcomes from MCP published papers into their curriculum to help new health professionals better understand patterns of risk and resilience in military populations.

However, the relationship between CDP and MCP has been expanded recently, as CDP researchers are now leading two new projects using Family Study data that can further inform future curricula.

Question: Low response rates are generally a challenge for survey studies. Has this been a challenge for the MILCO program as well?

PIs: Many longitudinal studies face decreasing response rates over time, and the Millennium Cohort Study is no exception. However, we have managed to maintain response rates that are as good as, or better than, any other current DoD longitudinal survey effort. Engagement between our survey cycles is a key component to retaining our study participants. One of the Millennium Cohort Study's most effective approaches for retaining our participants is by periodic engagement in the form of postcards that are sent to them on both Memorial Day and Veterans Day every year. This serves as both a thank you for their continued participation in the study and as a recognition of their military service. Similarly, the Family Study maintains regular contact by sending spouses postcards for the Month of the Military Child and the Month of the Military Family. In recent years, the Family Study also engages participants by sponsoring an ongoing contest for childrens' artwork among

“On numerous health topics, findings from our studies contribute to the body of knowledge of research that informs the development of DoD policies that prevent illness and injury to service members, veterans and military families.”

The Millennium Cohort Program, A Focus on Excellence In Survey Studies (continued from page 4)

participating families and including the winning pieces in an annual calendar mailed to all participants at the end of the year.

DON HRPP Question: It must take an excellent study team to execute a longitudinal study of this magnitude. Can you describe the members of the MILCO study team?

PIs: The success of the Millennium Cohort Program depends on the coordinated efforts and expertise of epidemiologists, biostatisticians, research psychologists, analysts, programmers and research coordinators. This highly specialized team is comprised of both military and civilian professionals. We also actively collaborate with researchers working at Navy research labs and those from other services including the Walter Reed Army Institute of Research, Army Center for Environmental Health Research, and the Uniformed Services University. We also have a longstanding collaboration with the VA and collaborate with subject matter experts and researchers from academic institutions and private research institutes. Those of us working within the Millennium Cohort Program are always actively working to expand our networks and build new collaborative bridges across the scientific community and to improve the effectiveness of our outreach in disseminating research

results among military stakeholders, the research community, and the broader public.

DON HRPP Question: Finally, do you have any advice or tips for researchers in the early stages of designing a survey study within the Navy?

PIs: In this rapidly changing regulatory and privacy environment, the best advice we can give is to start as early as possible. Seek and obtain buy-in from the respective commands at local installations and headquarters. Understand the numerous steps required for obtaining approval of the survey and data collection. To get ahead, it may be necessary to start the processes of obtaining survey and IRB approval at the same time. If you're interested in deploying your survey beyond the Navy, understand that adding additional Services or populations such as veterans will add another layer of regulations and required approvals. Your local IRB and DON HRPP are important resources and will be key to facilitating the connections you need to make and identifying the regulations you will need to meet and the approvals you will need to obtain.

For more information, please visit: <https://www.millenniumcohort.org/>



CONGRATULATIONS!

To Our Presenters

MHSRS Poster Presentation: "Challenges of Conducting DoD-funded Infectious Disease Research in Endemic Areas of the World: Balancing Research Objectives, Human Research Protections and Beneficence"

Mr. Derek Englis of DON HRPP (right), LCDR Michael Prouty of Naval Medical Research Center (NMRC) Silver Spring (not pictured), and Ms. Terri Brantley (left) of NMRC Silver Spring, present their poster at the 2018 Military Health System Research Symposium in Kissimmee, Florida.

The Revised Common Rule, What Exactly is This New “Limited IRB Review”? (continued from page 1)

approval is authorized.²

Now, let’s take a look at the new limited IRB review. Under the revised Common Rule (the final rule published in the Federal Register January, 2017), limited IRB reviews must be conducted for the following exemption categories: 2(iii), 3(i)(c), 7 and 8 (see table below for descriptions of applicable exemption categories³). Per the revised Common Rule, IRBs may use the expedited review *procedure* to review research for which limited IRB review is a requirement.⁴

For research that qualifies for exemption under categories 2(iii), 3(i)(c), and 8, limited IRB review will be a means/process in which IRBs can determine that there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.⁵ For research that qualifies for exemption under category 8, limited IRB review must also include determination that the proposed secondary research is within the scope of the broad consent and the investigator does not include returning individual research results to subjects as part of the study plan.⁶ Limited IRB review for research that qualifies for exemption under category 7 has modified

determination requirements. It must be determined that broad consent for storage, maintenance, and secondary research use of identifiable private information and identifiable biospecimens is obtained, and broad consent is appropriately documented. Also, limited IRB review for category 7 exemptions must determine that if there is a change made for research purposes in the way identifiable private information or identifiable biospecimens are stored and maintained, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.⁷ In the final rule, continuing review is not a requirement for limited IRB review.⁸

In summary, limited IRB reviews per the revised Common Rule will be conducted for the above mentioned exemption categories using the expedited review procedure. The purpose of a limited IRB review is to ensure that there are sufficient privacy and confidentiality protections for identifiable private information and identifiable biospecimens. In the Notice of Proposed Rule Making (NPRM) it is explained that the limited IRB review as a condition for exemption is based on the assumption that the potential risks raised by these categories of ex- (continued on page 7)

2(iii)	Research that only includes interactions involving educational tests, survey procedures, interview procedures or observation of public behavior; when the information obtained is recorded in such a manner that the identity of the human subjects can be readily ascertained, directly or through identifiers linked to the subject
3(i)(c)	Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses or audiovisual recording if the subject prospectively agrees to the intervention and the information collection; when the information obtained is recorded by the investigator in such a manner that the identity of the human subjects can be readily ascertained, directly or through identifiers linked to the subject
7 (New Category)	Storage or maintenance of identifiable private information or identifiable biospecimens for potential secondary research use
8 (New Category)	Research involving the use of identifiable private information or identifiable biospecimens for secondary research use

Table: Summary and description of exemption categories for which a limited IRB review will be a requirement under the revised Common Rule

The Revised Common Rule, What Exactly is This New “Limited IRB Review”?

emption are mostly informational and thus the most important role an IRB might play with respect to reducing potential harm is to ensure the application of privacy protections.⁹

2017/Rules and Regulations
pg 7189. <https://www.gpo.gov/fdsys/pkg/FR-2017-01-19/pdf/2017-01058.pdf>

Resources:

1. SECNAVINST 3900.39E CH-1 Enclosure 3, paragraph 11e.
2. 32 CFR 219.110
3. Revised Common Rule §_.104
4. Revised Common Rule §_.110(b)(1)
5. Revised Common Rule §_.111(a)(7)
6. Revised Common Rule §_.104(8)(iii)
7. Revised Common Rule §_.111(a)(8)
8. Revised Common Rule §_.109(f)(1)(ii)
9. Federal Register /Vol 82, No 12/Thursday, January 19,

Chidi Ioanou is the Training and Education Specialist at DON HRPP. She earned her B.S. in Biology at the George Washington University in Washington, DC and obtained a M.S. in Clinical Research Organization and Management from Drexel University. Prior to joining DON HRPP, she was the Lead Clinical Research Coordinator at a clinical research center for rare genetic metabolic diseases. While serving in that position, she created and implemented a training curriculum to support the program. Prior to that position, she was



DON HRPP News!!

- ◆ The general compliance date for the revised Common Rule is January 21, 2019. Commands should continue to review the revisions to the Common Rule to identify changes that will impact their Command. Commands should update their policies and procedures, as well as the Command Instructions, for human research protections to ensure compliance prior to January 21, 2019. [Note: The compliance date for §_.114(b) (cooperative research) remains January 20, 2020.]
- ◆ As a follow-up to the Department of the Navy Human Research Protection Program (DON HRPP) SECNAVINST 3900.39E CH-1 trainings held April 2018, a DON HRPP E-gram capturing training Q&A was released on August 3, 2018. If you have any comments or questions, please contact your DON HRPP point of contact.

We Need Your Help!



Get a BZ from RPU

Have a "Good News" story or picture from your Research Protection Program? Don't keep it to yourself! Why not share it with the DON Research Protection community? We're looking for material to publish in the *Research Protections Update* newsletter. Send your research news, success stories, tips, pictures, lessons learned, or other material related to the ethical conduct of human research to usn.ncr.bumedfchva.mbx.don-hrpp@mail.mil

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