## THE MILLENNIUM COHORT PROGRAM

A U.S. DEPARTMENT OF DEFENSE AND DEPARTMENT OF VETERANS AFFAIRS STUDY



# Protecting service member, veteran, and family health

Dear Colleague,

We are pleased to share with you our most recent Millennium Cohort Program updates. This newsletter includes brief summaries of new scientific publications released in recent months. Topics covered in these papers include information on service member and spouse drinking, self-reported health diagnoses related to blast exposure, and pre-incentives and survey response rates.

We are also happy to share that the Study of Adolescent Resilience (SOAR) (PI: Dr. Hope McMaster) has successfully launched and is in its final phase of data collection. SOAR is a research study of military-connected adolescents and their parents utilizing online survey data merged with medical data and other military and civilian records for those participants who volunteer to join the study. The study is currently enrolling military-connected adolescents (11–17 years old) of parents who have participated in the Millennium Cohort Study of service members and veterans, representing all armed service branches and active duty, Reserve, and National Guard components.

Sincerely,

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#### Service Member and Spouse Drinking Over Time<sup>1</sup>

This study analyzed data collected from 3,200 couples enrolled in the Millennium Cohort Family Study who were surveyed at baseline (2011–2013) and follow-up (2014–2016) to assess how partners influence each other's drinking behavior over time. Results suggest that changing the drinking habits of one spouse could lead to a change in the drinking habits of the other, which supports family-centered alcohol prevention approaches in the military. Dual-military couples may especially may benefit from targeted interventions, especially given their higher risk of unhealthy alcohol consumption.

### Blast Exposure and Self-reported Health Diagnoses<sup>2</sup>

This analysis of Millennium Cohort Study data examined whether single and repeated high-level blast exposure (e.g., from incoming munitions) and low-level blast exposure (e.g., from outgoing munitions) were associated with 45 different self-reported diagnoses of illness and injury. Outcomes examined included PTSD, depression, hearing loss, tinnitus, chronic fatigue syndrome, and migraines. Findings suggest that blast exposure elevated risks for more than 20 different diagnoses and that repeated exposure was associated with worse outcomes.

#### Pre-incentives and Survey Response Rates<sup>3</sup>

U.S. military and veteran populations are challenging to retain in longitudinal studies as they span the globe, frequently move, and are heavily surveyed. This study tested the effectiveness of multiple pre-incentives (\$2 bill, \$5 gift card, magnet, and Apple iPad<sup>®</sup> lottery entry) on increasing the response rate to the 2014 survey of the Millennium Cohort Study. Findings suggest that providing participants a monetary pre-incentive was an effective way to increase response rates and participant retention as well as re-engage participants who did not respond to a previous follow-up survey.

#### References

- Joneydi R, Sparks AC, Kolenikov S, Jacobson IG, Knobloch LK, Williams CS, Pflieger JC, Corry NH, Stander VA. Partner Effects: Analyzing Service Member and Spouse Drinking Over Time. Am J Prev Med. 2023 Apr 12:S0749-3797(23)00171-X. doi: 10.1016/j.amepre.2023.04.002. Epub ahead of print. PMID: 37059344.
- Belding, J.N., Kolaja, C.A., Rull, R.P., & Trone, D.W. for the Millennium Cohort Study Team. Single and repeated high-level blast, low-level blast, and new-onset self-reported health conditions in the U.S. Millennium Cohort Study: An exploratory investigation. Frontiers in Neurology. Volume 14 - 2023 | doi: 10.3389/fneur.2023.1110717
- Powell, T. M., Geronimo-Hara, T. R., Tobin, L. E., Donoho, C. J., Sheppard, B. D., Walstrom, J. L., Rull, R. P., & Faix, D. J. (2023). Pre-incentive Efficacy in Survey Response Rates in a Large Prospective Military Cohort. Field Methods, 0(0). https://journals.sagepub.com/doi/10.1177/1525822X231163668



For more information on recent publications, including links to full-text, please visit the study websites: *millenniumcohort.org* and *familycohort.org*