Prepared Statement

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Regarding

Department of Defense Monitoring of COVID-19

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Chairman Banks, Ranking Member Kim, distinguished Members of the Subcommittee, we are pleased to represent the Office of the Secretary of Defense to discuss the Department's ongoing health surveillance of the Force related to COVID-19 in the aftermath of the global pandemic.

This testimony provides the Committee with information on some of the key data used to track the health of Service members and updates on some of the past and future studies related to the impact of COVID-19 on the health of Service members.

COVID-19 Health Surveillance:

Service members, like all members of our Nation, experienced the effects of the global COVID-19 pandemic. The actions taken by the Department of Defense (DoD) to blunt the impact of the pandemic on the Force and to maintain operational readiness included force health protection measures like vaccinations, testing, masking, social distancing, and remote work. These actions saved lives and resulted in less severe disease and fewer hospitalizations among those Service members who were infected. Nevertheless, the impact of COVID-19 lingers with some Service members who, like many other Americans, are experiencing long-term effects of COVID-19 infections including Long-COVID and heart-related conditions.

Defense Medical Surveillance System (DMSS) - To answer complex epidemiological questions related to COVID-19, one source of data that can be used is the Defense Medical Surveillance System or DMSS. DMSS is a relational database that documents military and medical experiences of Service members throughout their careers. As the central repository of medical surveillance data for the U.S. Armed Forces, DMSS contains up-to-date and historical data on

diseases and medical events, including inpatient and ambulatory medical encounters, immunizations, prescriptions, laboratory data, deployment health assessments, and casualty data.

DMSS COVID-19 Studies - A DoD study published in December 2023, in the American Journal of Public Health, evaluated the degree of underreporting of SARS-CoV-2 infections within Service members.[1] This study estimated the true case count of COVID-19 cases, based on antibodies in serum, to be 1.7 to 9.3 times greater than the reported number of cases during the first year of the pandemic. This undercounting of the true number of COVID-19 cases underrepresented how SARS-CoV-2 infections contribute to adverse health circumstances such as cardiac conditions, complicating interpretation of causality for cardiac events in people with a history of COVID-19 regardless of vaccination status. This nuance is essential to interpreting causal linkages for COVID-19 seen within DOD data as well. Another example is the September 2023 DoD report to the Committee on Armed Services of the House of Representatives regarding cardiac and kidney issues in Service members prior to, and following, institution of a requirement to be vaccinated against COVID-19[2], as reflected within the DMSS. This study showed that unvaccinated individuals who had a reported SARS-CoV-2 infection were at a significantly higher risk of developing three cardiac conditions (myocarditis, pericarditis, and acute myocardial infarction) compared to individuals who received a COVID-19 vaccine.

[1] Taylor KM, et al., Seroprevalence as an Indicator of Undercounting of COVID-19 Cases in a Large Well-Described Cohort. AJPM Focus. 2023 Aug 15;2(4):100141. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10598697/

[2] Report to the Committee on Armed Services of the House of Representatives Department of Defense Report on Cardiac and Kidney Issues in Service Members Prior to and Following the COVID Vaccine. September 2023. Requirementhttps://www.health.mil/Reference-Center/Reports/2023/09/29/DOD-Report-on-Cardiac-and-Kidney-Issues-in-Service-Members-Prior-to-and-Following-the-COVID-Vaccine-Requirement

Defense Medical Epidemiology Database (DMED) – The Defense Medical Epidemiology Database or DMED provides limited remote access to DMSS data. It is designed for military public health professionals, medical providers, safety officers, force health protection officers, and medical researchers, to get quick access to summarized epidemiologic data for surveying health conditions in groups of Service members. Unlike DMSS, DMED has access only to aggregated data, not the identifiable individual Service member data in DMSS. Because DMED provides aggregated data only, DMED cannot differentiate between a new encounter for a medical condition and a follow up encounter. For example, a Service member seeing a medical provider for trouble breathing, whether it was their first visit or their tenth visit, would be reflected identically in DMED, making the data not usable to determine rates of new versus ongoing breathing trouble among Service members. Therefore, DMED cannot be used to identify or compare rates of new cases and is more useful to generate scientific questions rather than answer them. A DMED-generated question can be further explored using DMSS data and established research methodologies. DMED, used in its proper context, is a useful tool for DoD medical and public health professions to monitor health trends among their local populations and identify potential issues that require further inquiry or research. However, when a user does not recognize the limitations of DMED as a tool to generate questions rather than answer them, misinterpretation of the resulting DMED data, combined with inaccurate assumptions, can result in incorrected conclusions regarding rates of health conditions among groups of Service members.

Future COVID-19 Surveillance and Studies –The SARS-CoV-2 virus continues to circulate and evolve into new variants, presenting an ongoing health threat capable of harming Service

members and affecting operations. There is much more to be learned about the long-term health impacts of SARS-CoV-2 infection. The Department remains committed to protecting the health of the Force and to better understanding these impacts as we prepare for future health threats. Our ongoing studies will support the development of therapeutics and medical countermeasures. The relationship between SARS-CoV-2 infections or COVID-19 vaccinations and cardiac conditions is an ongoing focus of DoD surveillance and research. Multiple DoD-focused related studies are looking at long term outcomes of issues related to COVID-19, to include cardiac conditions associated with COVID-19 vaccination or illness. An example of this work is an ongoing study at Brooke Army Medical Center in San Antonio, Texas, which evaluates the "Cardiopulmonary and Cardiovascular Impact from COVID-19 among U.S. Service Members." This study is investigating whether there is an increased risk of sudden cardiac arrest or sudden cardiac death from consequential cardiovascular/cardiopulmonary disease as a result of SARS-CoV-2 infection compared to vaccination. As directed in Section 725 of the National Defense Authorization Act for Fiscal Year 2024 – "Study and Report on Health Conditions of Members of the Armed Forces Developed After Administration of COVID–19 Vaccine," the Department will develop a multi-year study to evaluate the long-term effects of COVID-19 infections and vaccinations among Service members. This study will improve understanding of both benefits and adverse health effects that may have resulted from COVID-19 vaccination by quantifying the negative health effects of SARS-CoV-2 infections in both vaccinated and unvaccinated Service members. This study, and others like it, will help inform future DoD policy, improve readiness, and help prepare for and mitigate future pandemics.

Thank you for inviting me here today to speak with you about the Department's health data, which enable our ongoing surveillance of the impact of the COVID-19 pandemic on the health of the Force. I look forward to answering your questions.