

Army Public Health and Preventive Medicine: Proactive Approaches to Readiness

Brigadier General Michael B. Cates

From my perspective as the Functional Proponent of Army Preventive Medicine, military public health includes essential elements that contribute to the overall health and well-being of our Soldiers, civilian employees and Families. Successful prevention leads directly to enhanced readiness through health. All Army leaders, Soldiers, civilian employees, and Families have a role in protecting their own health, and the Army Medical Department (AMEDD) has outstanding military and civilian experts ready and able to assist them.

Army public health encompasses a wide variety of expertise and capabilities, with personnel in over 50 specialties from every corps in the AMEDD. This team includes deployable individuals and units embedded in brigade combat teams up through the combatant commands' headquarters, preventive medicine personnel assigned to Army headquarters, military treatment facilities and installations, Army veterinary personnel, and the professionals assigned to the US Army Center for Health Promotion and Preventive Medicine.

Current public health challenges in our military include injuries, behavioral health issues, infectious diseases, chronic diseases and other conditions related to "lifestyle choices," environmental exposures, occupational hazards, and food and water vulnerabilities. All have various causes and effects, and all require a diverse set of solutions.

Injuries, mostly nonbattle injuries, place the largest burden on our military healthcare system, in garrison and during deployments. Falls, sports injuries, physical training, and private motor vehicle accidents are the major causes of nonbattle injuries in our military, creating significant productivity loss across the entire Department of Defense.

Behavioral health issues are a growing concern, especially among those who have deployed. There is a wide range of diagnoses in this field currently affecting an increasing number of our Soldiers.



BG Cates is the Commanding General, US Army Center for Health Promotion and Preventive Medicine; the Functional Proponent, US Army Preventive Medicine; and Chief, Army Veterinary Corps.

Appropriate and timely identification of those who need mental health care is difficult and, thus, a key piece toward successful resolution. Also, the stigma associated with any type of mental health care creates a disincentive for Soldiers to get the care they need. Education and training efforts are among the most important, proactive tools here, focused on improving behavioral health through early identification and reduced stigma.

Health threats from emerging or reemerging diseases include tuberculosis, malaria, drug-resistant *Acinetobacter* infections, leishmaniasis, and zoonotic diseases associated with indigenous animals. A full understanding of the epidemiology and pathogenesis of many of these is often lacking. So, surveillance, effective prophylaxis, early detection and rapid mitigation are the best approaches to decrease the impact of such health threats.

Recognizing that many of the health threats that Soldiers, civilians, and Family members face are caused by lifestyle choices, the Army public health and preventive medicine programs have embraced the

Army Public Health and Preventive Medicine: Proactive Approaches to Readiness

concept of educating individuals to prevent illness and injury through an aggressive health promotion and well-being campaign. Three continuing problems in Soldier health are tobacco use, weight control, and alcohol abuse. Each poses tremendous short-term and long-term health risks, and recent surveys depict negative trends among our military personnel and their Families that we must continue to address.

Our military has personnel deployed to more than 100 countries in any given week. The infrastructures of many of those countries are poor. Many times, we have very little knowledge of the history of those environments and their associated health risks, and when we do, the information we have may have already changed. Sampling may be slow or difficult as we attempt to learn more about the potential health risks to our military personnel deployed there. Yet, environmental surveillance—monitoring air, water, and soil for indigenous threats to health—is an absolutely necessary piece of the preventive medicine program.

New weapons and new vehicles employed by the military are better, bigger, and bring new health risks, such as acoustic energy, temperature extremes, shock and vibration, and oxygen deficiency. Of these examples, acoustic trauma, with resulting hearing loss or other problems, is the biggest concern.

In the future, food and water have growing potential for health risks. The United States has the best food and water safety program in the world, yet the Centers for Disease Control and Prevention estimate the incidence of foodborne illness at 76 million cases a year. As we deploy personnel into more than 100 countries with public health infrastructures not as robust as ours, the health risks from food and water are much higher. Today, we must also be concerned about intentional contamination of food and water, or the destruction of our water supply systems.

Our Army public health and preventive medicine team, relatively small in size, but broad and deep in

expertise, is currently working toward solutions to these current challenges around the world. Team members strive to protect our Soldiers, civilian employees, and Families locally while remaining ready and willing to project globally. They are an amazing group that rarely receives the credit they deserve for ensuring true Force Health Protection and Readiness. I am excited that this edition of the *AMEDD Journal* showcases, for the second straight year, some of their capabilities and contributions.

As we move forward, especially in a time of war, we must continue to improve our military public health efforts. For one, we must place greater emphasis, from all levels, on preventive health, to include more of an investment, looking for the long-term, as well as the short-term benefits of such efforts. Our surveillance must be more synchronized within the Department of Defense and the rest of the US Government, with easy information links between human and animal health, as well as with the environment. We must provide timely, accurate, and actionable data to our commanders in the field to quickly identify and mitigate any significant health risks, and we must have effective ways to change risky behaviors and reduce injuries. Most importantly, partnerships and collaborative efforts should be enhanced among our military public health experts in all of the uniformed services, as well as with outside agencies.

Preventive medicine is crucial in maintaining the readiness of our most important resource—our people. Sustaining, and even improving, a Soldier's health is a much wiser use of resources than waiting until that Soldier becomes sick or injured before attempting to restore health. The better we prevent diseases, conditions and injuries, the more resources will be available to apply to those things we cannot prevent. While there is continuing and growing emphasis on proactive approaches to health in today's society and military, we must all strive toward translating that into real, even greater long-term investments in the future of our personnel. Prevention is the best way to health.

