USAPHC
UNITED STATES ARMY PUBLIC HEALTH COMMAND
Public Affairs Office
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Laboratory Sciences Portfolio

Mission

Laboratory Sciences Portfolio provides a full spectrum of environmental, occupational, radiological and disease surveillance laboratory support services for Army, DOD and other government customers. The portfolio's experts provide food microbiology and disease surveillance services, and chemical analysis of air, water and soil samples from various locations in order to identify potential contaminants that pose a threat to public health in food, the workplace or the environment. The work performed by this portfolio primarily supports a safe living and working environment for Army personnel.

Background

Laboratory Sciences is one of the oldest organizations at the U.S. Army Public Health Command. Elements of the Laboratory Sciences Portfolio have been around for nearly 70 years, since the establishment of the U.S. Army Industrial Hygiene Laboratory at the beginning of World War II.

Clients

Laboratory Sciences' clients are DOD leaders, Army commanders and organizations, including medical treatment facilities and deployed units, as well as several government agencies.

Structure and Organization

Laboratory Sciences Portfolio is one of nine portfolios that comprise the Army Institute of Public Health, a subordinate unit of the USAPHC. Laboratory professionals work closely with USAPHC experts in health risk assessment, occupational and environmental medicine, radiation and food safety to supplement laboratory results with assessments of health risk and recommendations to mitigate or control those risks.

The Laboratory Sciences Portfolio operates the only DOD Cholinesterase Reference Laboratory. This unique laboratory provides regular testing of blood samples for a critical blood enzyme (cholinesterase) to provide medical surveillance of workers with potential exposure to nerve agents at various locations around the world.

The Laboratory Sciences Portfolio provides integrated environmental, food protection and disease surveillance laboratory testing and consultation to DOD customers. The services include disease surveillance in animals and arthropods that transmit many human diseases that can be screened in these carriers to prevent disease outbreaks in humans.

The Laboratory Sciences Portfolio also provides a unique capability to test embedded metal fragments removed from injured service members to evaluate potential long-term health risks. Moreover, the Laboratory Sciences Portfolio provides urine analysis for depleted uranium using a bioassay that can detect traces of DU in bio-fluids of service members returning from deployments. It is among the few laboratory facilities in DOD that has this capability.

The Laboratory Sciences Portfolio also hosts the DOD's Food Analysis and Diagnostics Laboratory, which provides molecular biology and microbiological disease surveillance and chemical testing of food and water.

Laboratory Sciences Portfolio's Client Services has experts ready to help and support USAPHC's customers to plan projects that require laboratory support. They ensure close coordination with customers from a project's inception to conclusion. They manage incoming customer requests, and often work closely with customers providing and sharing their scientific experience and knowledge, and ensuring they match the lab's capabilities and the customer's needs. Experts in this area are also able to take highly technical laboratory results and communicate them in a clear, understandable manner to customers and clients.

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Laboratory Science's People

More than 243 people work in the Laboratory Sciences Portfolio. They are distributed over six USAPHC laboratories located at the Army Institute of Public Health, Edgewood, Md.; Public Health Command Region–South, San Antonio, Texas; PHCR–Europe, Landstuhl, Germany; PHCR–Pacific, Camp Zama, Japan; PHCR–North, Fort Meade, Md.; and PHCR–West, Joint Base Lewis-McChord, Wash. The workforce consists of military and civilian personnel in a broad range of medical and scientific disciplines. Chemists, biochemists and physical scientists, as well as physical science technicians, medical lab technicians, industrial hygienists and administrative personnel are just some of the occupations within the portfolio. In addition to their professional experience, some staff members hold advanced academic degrees and certifications in their respective areas of expertise.

The Laboratory Sciences Portfolio supplements its expertise from multidisciplinary public health experts within USAPHC and also works with other federal organizations, including the Defense Threat Reduction Agency, Department of Energy, Department of Justice and Nuclear Regulatory Commission.

Benefits for the Army

Laboratory Sciences Portfolio's labs boast state-of-the-art technology and capability, and its experts are often asked to analyze unique air, water and soil samples that are sent in from deployments around the world. They often analyze samples from various military locations to determine the level of contaminants. Most notably, the portfolio has provided critical analytical services during events of national significance including the Sept. 11, 2001, terrorist attack on the Pentagon, Hurricane Katrina, the Gulf of Mexico oil spill, and the Japanese earthquake and subsequent tsunami and nuclear accident of 2011.

Moreover, experts at the Laboratory Sciences Portfolio often provide hands-on training in environmental chemistry to Soldiers and units preparing for deployments. In addition, several USAPHC laboratories provide oversight and quality assurance to smaller units within the Army or sister services within their theater of operations.

Laboratory Sciences Portfolio is committed to keeping the Army workforce safe. Through the use of state-of-the-art technology, the Laboratory Sciences Portfolio conducts testing on samples from "anywhere troops go" and produces analytical reports on what potential contaminants are in these environments, ensuring the safety and well-being of military and civilian DOD personnel.