

Occupational Health Sciences Portfolio

Mission

The mission of the Occupational Health Sciences Portfolio is to foster the prevention of workplace exposure-related injury, disease and death. The portfolio does this by providing a wide range of occupational health and injuryprevention services in support of Soldiers and the civilian workforce, commanders, policymakers and the Army Medical Department leadership. The portfolio provides expertise in the anticipation, recognition, evaluation and control of chemical, physical and biological stressors in the workplace.

Background

The Occupational Health Sciences Portfolio provides services that are among the most long-standing at the U.S. Army Public Health Command and its predecessor organizations. Elements of the 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.

Customers

The portfolio customers are DOD and Army leaders and units, including installations, medical treatment facilities and deployed units. Services are also provided on a reimbursable basis to other federal government organizations such as the Secret Service and the Transportation Security Administration.

Structure and Organization

The Occupational Health Sciences Portfolio is one of nine portfolios at the Army Institute of Public Health, a subordinate unit of the USAPHC. It is composed of seven programs:

* **Ergonomics Program** — Experts in this program serve military and civilian personnel worldwide by reducing and preventing work-related musculoskeletal injuries. They identify risk factors for musculoskeletal injuries in the workplace, and identify solutions to mitigate those factors. A current initiative is to implement in U.S. Army Medical Command facilities a safe-patient handling program designed to identify and modify equipment to aid hospital staff lift patients in ways that do not cause injuries. The program staff provides leadership and support to its clients in the areas of ergonomics program development; education and training; system evaluation, analysis and measurement; and applied research.

* Health Hazard Assessment Program — The Army surgeon general established this program in 1981 to evaluate the potential health effects of operating military weapon systems and, in 1995, designated the USAPHC as the Lead Agent. The primary goal of the program is to identify and eliminate or control health hazards associated with the life cycle management of weapons, equipment, clothing, training devices, and other materiel systems. Specific objectives of the program are to preserve and protect the health of individual Soldiers; reduce degradation of Soldier performance and enhance system effectiveness; design out health hazards to eliminate the need for health hazardbased retrofits; and reduce readiness deficiencies attributable to health hazards.

* Industrial Hygiene Field Services Program — This program conserves resources and enhances readiness by providing leadership, direction and services to Army leaders in order to anticipate, recognize, evaluate and control health hazards where military and civilian personnel work and serve. Experts in this program conduct site visits and technical consultations in military and civilian workspaces to perform exposure assessments. The data gathered from the assessments are used to make recommendations to control and eliminate exposures to chemical, biological, or physical hazards in the workplace.

* Industrial Hygiene and Medical Safety Management Program — Experts in this program provide assistance to medical treatment facilities on Joint Commission accreditation. They also provide industrial hygiene program assistance, training and Army representation to the Defense Occupational and Environmental Health Readiness System.



* Health Physics Program — Ionizing radiation, both natural and man-made, is one of many potential health hazards to which Soldiers, Army civilians and contractors, and others may be exposed. Army personnel may also be exposed to ionizing radiation from foreign industrial, nuclear power and military sources during deployments and training exercises. Experts in the health physics program protect the health of Soldiers and civilians and the environment from the harmful effects of ionizing radiation by monitoring radiation doses and conducting health risk assessments. They frequently deploy to locations worldwide to monitor levels of radiation exposure and offer solutions for mitigating associated risk factors.

* Laser/Optical Radiation Program — Physicists in this program evaluate the optical radiation hazards associated with lasers and high intensity light sources (such as search lights and countermeasures). Program experts also verify the adequacy of laser eye protection, conduct laser safety training, perform surveys of laser safety programs, evaluate laser overexposure incidents, and develop technical standards for the use of lasers and optical radiation sources. The program is currently evaluating systems that detect and neutralize improvised explosive devices and are developing criteria for assessing the effectiveness of dazzling lasers.

* Radiofrequency/Ultrasound Program — Engineers in this program evaluate the radio frequency radiation hazards associated with radars and communication electronic systems (such as radios and electronic countermeasures). Program experts also conduct radio frequency radiation safety training, perform surveys of radio frequency radiation safety programs, evaluate radio frequency radiation overexposure incidents, and develop technical standards for the use of radars and communication electronic systems. The program is currently assisting medical treatment facilities with implementing procedures for preventing electromagnetic interference with medical equipment.

Occupational Health Science's People

Approximately 75 people work in the Occupational Health Sciences Portfolio at the Army Institute of Public Health. They include military and civilian personnel in a range of scientific disciplines—ergonomists, physicists, health physicists, mechanical engineers, electrical engineers, occupational therapists, industrial hygienists and administrative personnel are just some of the occupations within the portfolio. In addition to their professional experience, many staff members hold advanced academic degrees and certifications in their respective areas.

The Occupational Health Sciences Portfolio supplements its expertise through coordination and collaboration with the multidisciplinary public health experts within USAPHC. Also, through participation on numerous national and international standard settings bodies, they are shaping the professional practice of their disciplines.

Benefits for the Army

The work performed by the Occupational Health Sciences Portfolio helps ensure safe working environments for Soldiers and Army communities. The portfolio provides support to the industrial base, military medical treatment facilities and deployed U.S. forces around the globe.

Additionally, the portfolio conducts advanced technical training to include the Intermediate Industrial Hygiene Course and the Laser/Radiofrequency Course, Ergonomics Courses and a Design Review and Blueprint Reading Course. As subject-matter experts, portfolio members also serve as guest instructors at the Army Medical Department Center and School, the training and education "home" of Army Medicine.