



USAPHC

U.S. ARMY PUBLIC HEALTH COMMAND





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Maj. Gen. Jimmie O. Keenan
Commander



Maj. Gen. Jimmie O. Keenan entered the Army as a Nurse Corps officer in 1986. She has had a variety of increasingly challenging professional and command assignments, most recently as a hospital commander, serving across the U.S. and in deployed locations. She served as chief of staff of the Pentagon's Army Warrior Transition Command, and she has been a recruiter; Army Congressional Fellow; and chief, Congressional Liaison Office, Office of the Army Surgeon General. She holds a Master of Science in Nursing Administration and a Master of Science in Strategic Studies. She is both chief of the Army Nurse Corps and commander of the U.S. Army Public Health Command.

John J. Resta
Deputy to the Commander for Public Health



John J. Resta began working for the Army Environmental Hygiene Agency (later the U.S. Army Center for Health Promotion and Preventive Medicine) in 1980, holding technical positions in various environmental programs prior to becoming director of Health Risk

Management. He served as the scientific advisor to the commander of the USACHPPM, then assumed the role of director of the Army Institute of Public Health and deputy to the commander of the USAPHC for public health. Resta holds environmental and civil engineering degrees and earned a Master of Science in national resource strategy from the National Defense University.

Command Sgt. Maj. Gerald C. Ecker
Senior Enlisted Advisor



Command Sgt. Maj. Gerald C. Ecker entered active service in 1987 as a combat medic. He has served as a trainer and leader in positions of increasing responsibility in the U.S. and in deployed locations, including four deployments to Iraq. He holds a Bachelor of Science degree, numerous emergency medical certifications and is a graduate of the National Registry of Emergency Medical Technicians. Ecker is Jumpmaster-, Air Assault- and Ranger-qualified and has earned the Expert Field Medical Badge and Combat Medical Badge (2nd award) among other decorations. He became the first command sergeant major of the USAPHC in March 2011.

Col. Erik H. Topping
Deputy to the Commander for Veterinary Services



Col. Erik H. Topping was commissioned in 1986 and entered the Army Veterinary Corps as a Doctor of Veterinary Medicine in 1989. He holds a Master of Public Health in epidemiology and biostatistics and graduated from the Army War College in 2009. He has served

in various medical and veterinary units in the U.S. and overseas, as well as in the Total Army Personnel Command and the Department of Defense Veterinary Service Activity. He assumed command of the Great Plains Regional Veterinary Command in 2008 and then served as commander, U.S. Army Veterinary Command. Topping currently is USAPHC deputy to the commander for veterinary services.

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Optimizing HEALTH

The U.S. Army Public Health Command, headquartered at Aberdeen Proving Ground, Md., is the only organization within the Department of Defense to provide a single point of responsibility for public health in its mission to prevent disease, injury and disability in Soldiers and retirees, their family members, and Army civilians as well as to assure effective execution of full-spectrum veterinary services for the Army and DOD.

Combining the two legacy commands of the Center for Health Promotion and Preventive Medicine and the Veterinary Command and bringing executive agencies like the Armed Forces Health Surveillance Center and the Military Vaccine Agency within our administrative support network allows us to collaborate and cooperate more effectively and efficiently to accomplish our public health mission.

The USAPHC continues to have the Soldier as our first priority, and we have expanded mission areas to include retirees, families and Army civilians. The individuals in this command maintain high levels of expertise and training in their fields and use their combined knowledge to support our mission. The quality and types of services we are able to offer—Army wellness centers, behavioral health surveillance, health risk assessments, injury prevention, food safety and more—employ evidence-based public health practices supported by some of the best and brightest public health experts in their fields.

The USAPHC will continue to offer the best and most effective public health and preventive medicine services in support of the Army and the DOD.

We welcome your interest in our organization and invite you to learn more about us in these pages.

Jimmie O. Keenan
Major General, U.S. Army

A history of excellence



NEW CHAPTER IS BEING WRITTEN IN the histories of the U.S. Army Center for Health Promotion and Preventive Medicine and the U.S. Army Veterinary Command. The two formally merged to form the U.S. Army Public Health Command on Jan. 4, 2012.

As the U.S. Army Public Health Command, they share a mission to promote health and prevent disease, injury and disability of Soldiers and military retirees, their families, and Army civilian employees; and to assure effective execution of full-spectrum veterinary service for Army and DOD veterinary missions. Together, their Soldiers and civilians will draw on distinguished legacies to provide service to Army and DOD customers around the world.

The lineage of the USACHPPM can be traced back to the Army Industrial Hygiene Laboratory, which was established at the beginning of World War II under the direct jurisdiction of the Army surgeon general.

AIHL originally was located at the Johns Hopkins School of Hygiene and Public Health; it had a staff of three and an annual budget of \$3,000. Its mission was to conduct occupational health surveys and investigations within the Department of Defense industrial production base, a mission that proved beneficial to the nation's war effort.

In October 1945, AIHL was transferred to what was then known as the Chemical Warfare Center, Edgewood Arsenal, Md., now Aberdeen

Proving Ground–Edgewood Area. At that time, Army Regulation 40-220, Industrial Medical Program, was published as the first regulation on industrial hygiene. This document turned out to be a milestone in preventive medicine in the Army. From 1940 to 1960, AIHL's mission and personnel continued to expand, and AIHL became the U.S. Army Environmental Hygiene Agency.

In 1973, USAEHA became a subordinate command of the U.S. Army Health Services Command (the latter later became U.S. Army Medical Command). The following year, USAEHA was given command of the health and environmental resources of the Army medical laboratories. These assets became USAEHA subordinate commands and later USACHPPM subordinate commands: USACHPPM North, Fort George G. Meade, Md; USACHPPM South, Fort Sam Houston, Texas (now renamed Joint Base San Antonio); and USACHPPM West, Fort Lewis (now renamed Joint Base Lewis-McChord), Wash.

USAEHA remained an internationally known agency with its mission expanded to support the worldwide preventive medicine programs of the Army, DOD and other federal agencies. On Aug. 2, 1994, USAEHA was redesignated USACHPPM, with provisional status and a general officer leadership; USACHPPM became fully functional on Oct. 1, 1995.

In addition to its continental United States regional commands, USACHPPM also had two subordinate commands outside the continental United States. In 1994, the 10th Medical Laboratory, located at Landstuhl, Germany, came under the operational control of USACHPPM. In 1995, the 10th Medical Laboratory was inactivated, and USACHPPM Europe was activated. Also in 1995, the Environmental Health Engineering Agency, Sagami, Japan, was redesignated USACHPPM Pacific. In 1997, USACHPPM Pacific relocated from Sagami to Camp Zama, Japan.

On Oct. 1, 2009, USACHPPM changed its name to the U.S. Army Public Health Command (Provisional). The former USACHPPM subordinate commands became Public Health Command Regions North, South, West, Europe and Pacific. In a July 11, 2011, ceremony at Aberdeen Proving Ground, the USACHPPM colors were cased, and the organization was formally reflagged as the U.S. Army Public Health Command.

The U.S. Army Veterinary Command was activated Oct. 2, 1994, as a major subordinate command of U.S. Army Medical Command. The Army is the DOD Executive Agent for Veterinary Services, and VETCOM executed this mission by supporting Army, Air Force, Navy and Marine Corps installations and units throughout the world. Responsibility for installation veterinary service as well as command and control of veterinary service personnel for all of Europe was added in July 2007, and mission responsibility for Korea, minus command and control of its personnel, was added in November 2007.

VETCOM headquarters was located at Fort Sam Houston, Texas, with six subordinate regional veterinary commands and 21 district veterinary commands or equivalents supporting almost 500 DOD installations worldwide. VETCOM also included two DOD-level activities, the DOD Veterinary Food Analysis and Diagnostic Laboratory and the DOD Military Working Dog Veterinary Service, a state-of-the-art referral center for military and federal working dogs and a training center for military veterinary interns and residents.

The command had more than 395 duty sites, 133 attending sites, and 168 veterinary clinics in exotic and distant locations such as Cuba, Japan, Guam, Singapore, Turkey, Italy and Spain as well as throughout the United States. It also supported missions in most areas of the world, including the Philippines, Laos, Vietnam, Kwajalein, New Zealand, Australia, Africa, and Central and South America.

VETCOM's approximately 2,000 personnel included veterinarians, warrant officers, enlisted Soldiers, and appropriated- and non-appropriated-fund civilians who provide a variety of services, including the following:

- ▶ Food protection and quality assurance,
- ▶ Medical and surgical care to government-owned animals such as working dogs and ceremonial horses for the DOD and other federal agencies,
- ▶ Surveillance and control of zoonotic and transmissible animal diseases, and care of pets owned by active-duty and retired service members, and
- ▶ Trained and ready Active and Reserve Component personnel.

Throughout its short history, VETCOM vigorously addressed the veterinary service issues facing the MEDCOM, the Army and the DOD, continuously improving and refining its capabilities to support a wide diversity of needs and challenges to include the increased threat of intentional food contamination, an unparalleled expansion of the numbers and types of military working dogs, and the significantly increased support required for Operations Enduring Freedom and Iraqi Freedom.

VETCOM cased its colors in a July 22, 2011, inactivation ceremony at Fort Sam Houston, combining forces with the former U.S. Army Center for Health Promotion and Preventive Medicine to create the U.S. Army Public Health Command. ▲



Johns Hopkins School of Hygiene and Public Health
USAPHC photo

MISSION STATEMENT

Promote health and prevent disease, injury and disability of Soldiers and military retirees, their families, and Department of the Army civilian employees; assure effective execution of full-spectrum veterinary service for Army and Department of Defense veterinary missions.

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The vision of the U.S. Army Public Health Command is to be a world-class provider of public health services across the Army and DOD.

THE USAPHC BALANCED SCORECARD SUPPORTS:

- ▶ **Healthy People**—Soldiers (Active, Army Reserve, and Army National Guard), Army civilians, family members, and retirees will attain high-quality, longer lives free of preventable disease, disability, injury and premature death.
- ▶ **Healthy Animals**—Military working dogs and government-owned animals will be mission capable. Well-being of Soldiers and beneficiaries will be improved by healthy, longer-living pets.
- ▶ **Healthy Workplaces**—Soldiers and Army civilians will work in locations free of hazards and in compliance with all applicable standards.
- ▶ **Healthy Communities**—Soldiers and family members will live on military installations with air, land and water meeting environmental standards and with facilities that enhance health and well-being.

THE USAPHC OBJECTIVES ARE:

- ▶ Optimize Public Health Programs and Practices
- ▶ Ensure Safe DOD Food and Water
- ▶ Improve Disease & Injury Surveillance and Control
- ▶ Integrate Delivery of Health Promotion and Wellness Services
- ▶ Minimize Risk from Occupational & Environmental Health Hazards
- ▶ Ensure High-Quality Veterinary Clinical Services

For nearly 10 years, the balanced scorecard has been the tool Army medicine uses to focus U.S. Army Medical Command organizations at the strategic level. The USAPHC's balanced scorecard aligns with that of the MEDCOM, as do the scorecards of other MEDCOM organizations, cascading ultimately to all levels of the command.

The balanced scorecard tracks performance and, through its focus on goals and associated measurements, it helps improve operational and fiscal effectiveness. USAPHC's balanced scorecard is a changing document, adjusting to the needs of USAPHC's DOD, Army and medical clients. Updating and adjusting it is USAPHC's disciplined approach for prioritization, decision-making, communication, organizational improvement, accountability and best-practice identification.

Our balanced scorecard succinctly captures USAPHC's strategy. It is built on USAPHC's mission (why we exist), vision (where we want to be) and "Strategic Themes" (pillars of excellence around which the strategy focuses). It then aligns strategic objectives (what we need to do to ensure success) across four interdependent levels: Patient/Customer/Stakeholder ("Ends"—healthy people, animals, workplaces and communities), Internal Processes ("Ways"), Learning and Growth ("Means") and Resources (also "Means"). ▲

Army public health: Building and sustaining good health



Healthy activities
U.S. Army photo

Public health is the science and art of preventing disease, prolonging life, and promoting physical health through organized, population-based efforts. The USAPHC has broadened this definition to include the mission to prevent disease, injury and disability in Soldiers and retirees, their family members, and Army civilian employees, as well as to assure effective execution of full-spectrum veterinary services for Army and DOD veterinary missions. Since disease, injury and disability do not recognize geographical borders, USAPHC's mission is global.

The USAPHC's public health responsibilities encompass the "One Health" concept, extending beyond humans to animals and the environment, where some of the causes of disease, injury and disability originate. Rabies, unsafe drinking water, spoiled food, ineffective sanitation measures, reactions to industrial chemicals, and mold in the workplace—these are just a few of the health threats that Army public health professionals address.

Below are some examples of how USAPHC, through the Army Institute of Public Health and its regional commands, executes its public health mission and proactively works to build and sustain good health.

Epidemiology and disease surveillance personnel identify emerging epidemics, spikes in medical conditions that may need medical intervention, and longer-term disease trends. This helps medical providers take action to stop the spread of disease, prioritize resources to address diseases that are most dangerous or costly, and identify health issues that may be specific to communities. Coordination with USAPHC's veterinary epidemiologists increases USAPHC's ability to discover and combat zoonotic diseases as well.

In response to Army leaders' concerns about suicide, post-traumatic stress, substance abuse and other negative behaviors, USAPHC conducts surveillance of behavioral health issues. Results are reported to Army leaders and used to prioritize actions to address contributing factors. USAPHC also conducts field investigations to gather data and assess events within a specific community where behavioral health issues occur at unusual levels.

Injury prevention studies and surveillance have shown that injuries are the leading health problem in the military, resulting in about two million visits to medical treatment facilities a year. These injuries mean duty time lost to recovery, which in turn affects unit readiness. USAPHC's injury prevention experts have done multiple studies to learn the causes of injuries during basic training. These studies directly contributed to the implementation of new physical fitness training programs and guidance that optimize fitness while minimizing injuries and resultant lost-duty days.

USAPHC **ergonomists** have launched a program to train Soldier and civilian nurses in safe patient-handling methods. By lessening back and other musculoskeletal injuries to nurses and others who need to move patients, the program ultimately reduces workers compensation expenses and lost or lessened workdays due to patient-handling injuries.

USAPHC also works to prevent injuries to **hearing and vision** across the DOD. Hearing and vision experts conduct surveillance through medical databases while working to institute improved coding of these injuries, collaborate with acquisition and research partners to establish hearing and vision protection products and provide training. The training ranges from use of the combat arms earplug for Soldiers conducting marksmanship training to training medical providers about high-incidence injuries, equipment use and testing.

Health hazard assessment experts at the USAPHC collaborate with Army acquisition partners early in the process of materiel development to help prevent occupational injuries and other health effects. They provided input on the Stryker family of vehicles, the Terminal High Altitude Area Defense Missile system, and the enhanced combat helmet by evaluating potential health effects to Soldiers.

Environmental health risks in garrison and in deployed environments are also addressed by USAPHC's programs and regional commands. To ensure Soldiers would have enough safe water even in deployed environments, USAPHC's water quality experts assessed the effectiveness of commercial off-the-shelf water treatment systems made for individual use. With partners from other services and other water experts, USAPHC identified and published the capabilities of numerous systems so that Soldiers and units could make operationally sound choices for their specific needs.

Throughout U.S. Central Command, dust from the desert, industrial operations and burning is widespread. The dust can cause a number of short-term health effects (the potential for chronic health effects is still not known). USAPHC's **environmental medicine and health risk management** experts working with other DOD partners assess,

report and document the nature and possible risks to operations posed by dust and particles from industry, sulfur fires and burn pits. These questions are of interest to individual Soldiers, line leaders and healthcare professionals.

In addition to sampling, assessing reporting and archiving air, water and soil samples taken in garrison and deployed environments, USAPHC develops chemical and biological **military exposure guidelines** to help decision-makers in identifying, evaluating and managing these types of occupational and environmental risks.

Industrial hygienists from USAPHC evaluate possible hazardous occupational exposures in the workplace and other garrison environments. A recent example of their work was assessment of wounded warrior quarters on the former Walter Reed Army Medical Center campus to identify the causes of and prevent mold growth. After the command took recommended remedial steps, retesting showed that remediation in all rooms was successful.

USAPHC's **occupational health** specialists also include experts in radiation, laser, radio-frequency and ultrasound safety. They monitor occupational exposures and recommend preventive measures.

The addition of veterinary service capabilities has strengthened USAPHC's preventive capabilities in the areas of **food protection**. Veterinary service personnel routinely conduct sanitation audits and inspections of food production facilities, dining facilities and retail establishments on posts. They audit food and bottled water procurement sources off-installation and overseas and conduct food and water vulnerability assessments on and off installations. Veterinary service personnel annually conduct more than 3,000 commercial food audits a year, more than 4,000 installation food vulnerability assessments, and almost 30 food defense assessments for special events. The synergy produced by the collaboration of veterinary assets and USAPHC and garrison preventive medicine personnel will standardize monitoring functions and coordinate efforts resulting in optimized services.

Veterinary service personnel joined USAPHC radiation safety, environmental science and industrial hygiene experts to monitor water, food and installation conditions after the 2011 Japanese disasters.

Veterinary service personnel also protect the health of DOD's military working dogs and beneficiary pets worldwide.

Kuwaiti oil-well fires
USAPHC photo





USAPHC works with **Community Health Promotion Councils** to synchronize services at a given installation so that issues such as suicide, substance abuse, financial problems, and marital/family problems are addressed holistically. This means ensuring that all service providers work together to make the services a given Soldier, family or civilian needs easily available and mutually supportive.

Creating partnerships for health
USAPHC photo

The USAPHC's **Army Wellness Center model** provides services designed to promote and sustain healthy lifestyles. The centers offer fitness and wellness testing, nutrition counseling, stress management, tobacco education, general wellness education and other services depending on needs determined by the CHPCs in the community in which they are located. By standardizing AWC services, Soldiers and their families will have access to consistent programs at any AWC.

Health education is addressed through program and product development for healthcare providers and health promotion personnel in the areas of suicide prevention, sexually transmitted disease, post-partum fitness and parenting, nutrition, tobacco, obesity and female Soldier health. Army Knowledge Online and Defense Connect Online are used to deliver weight control and tobacco cessation programs directly to customers.

In addition to these ongoing missions and services, USAPHC provides rapid response to emerging public health threats through its three **Specialized MEDCOM Response Capability-Public Health** teams.

Through its unique mission and capabilities, USAPHC is helping Army medicine transform to a prevention-focused system for health. Protecting our customers from conditions that threaten their health is operationally sound, cost effective and better for individual well-being. Though care of the ill and injured will always be necessary, the demands for such care will be reduced through prevention and health promotion. With the creation of its public health organization, Army medicine is on the pathway to realizing this proactive, preventive vision. ▲

(Left) Commissary walk-through food inspection
USAPHC photo



Serving through science

Staffed with experienced professionals familiar with the military's special needs, the USAPHC's five public health command regions and the USAPHC Army Institute of Public Health are uniquely able to respond to emergencies and support projects with unusual and military-specific requirements.



Radiation testing
USAPHC photo

The public health command regions provide public health and preventive medicine services to customers in their areas of operation across the globe. In the continental U.S., regional commands are located at Fort Meade, Md.; Joint Base San Antonio, Texas; and Joint Base Lewis-McChord, Wash. Two additional regional commands are currently located in Landstuhl, Germany, and Camp Zama, Japan.

The AIPH, co-located with the USAPHC Headquarters at Aberdeen Proving Ground, Md., consists of nine technical public health portfolios. The AIPH technical portfolios provide military-unique operational and strategic services and expertise used to develop public health programs and provide technical supervision in collaboration with the five public health command regions around the world.

Nationally recognized experts in public health fields are located at the institute along with technical personnel in many specialized fields such as ergonomics and health physics, and their expertise will be available as needed across the Medical Command public health enterprise. ▲

Regional operations: Service delivery close to our customers

Routine installation support work is performed by the personnel at the public health command regions. If additional technical assistance is needed, the regions have reach-back capability to the resources of the Army Institute of Public Health. Each public health command district within the regions also supports three major missions, providing oversight of food safety through detailed, routine inspections of food processing plants that sell food to the military and inspecting operational food rations, like Meals Ready to Eat. Districts also provide veterinary care to military working dogs and government-owned animals within the region and routine and emergency care for the pets of USAPHC's eligible tri-service beneficiaries.

Public Health Command Region-North provides regionally focused direct veterinary, preventive medicine and health promotion support in a 22-state area of responsibility from Maine to North Carolina and as far west as Minnesota. It provides comprehensive, full-spectrum public health services to protect, enhance and sustain our forces. PHCR-North promotes preventive medicine and health protection and provides veterinary services from districts and branches located across the Northeast region.

PHCR-North has five divisions: Environmental Health Engineering, Occupational Health Sciences, Laboratory Sciences, Health Risk Management and Veterinary Services. Each division has a separate mission within the unit, but all divisions collaborate as needed to respond to customer requirements.

Public Health Command Region-South provides public health leadership, evidence-based preventive medicine programs and veterinary services to optimize the health of military units, installation personnel and animals within 11 southeastern states, the Caribbean and Central America. Its military and civilian personnel work in technical divisions that collaborate to provide a wide range of services to support its regional customers.

Like the other public health command regions, PHCR-South provides support in multiple technical areas with the added capabilities of the DOD Food Analysis and Diagnostic Laboratory and the DOD Military Working Dog Veterinary Service. In addition, the Cholinesterase Reference Laboratory supporting occupational health medical surveillance provides the reference laboratory and database repository in support of the DOD Chemical Surety Program.

Public Health Command Region-West provides public health, veterinary consultation, and technical support to more than 200 installations across 20 western states, including Alaska. This regional asset of the USAPHC currently includes four technical services divisions and four districts. Additional services by PHCR-West personnel include evaluating and reducing noise and lead contamination at indoor firing ranges at Army Reserve centers and training deploying personnel on the use of the latest air sampling equipment and deployment exposure surveillance equipment.



Laboratory support to customers
USAPHC photo



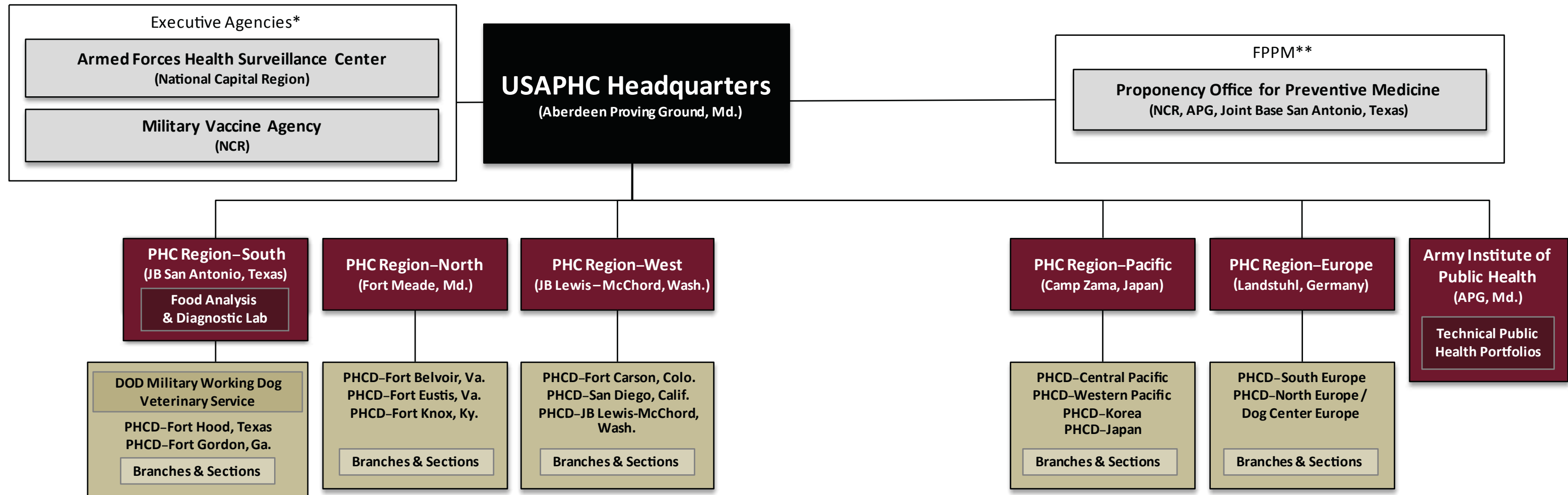
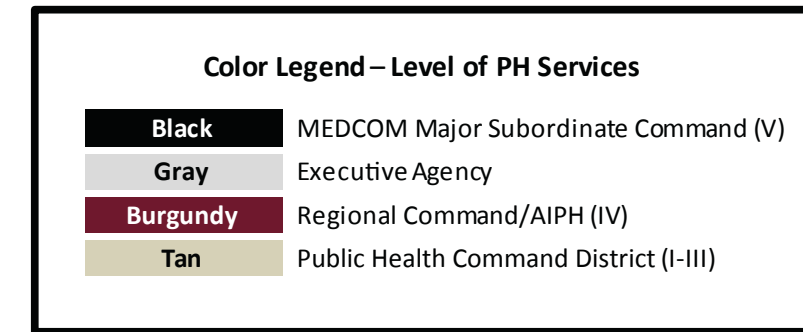
(Clockwise) Microscopic diagnosis of disease; operational planning for deployments; monitoring insect vectors; and oral surgery on a military working dog
USAPHC photos

Public Health Command Region-Europe integrated assets of the legacy USACHPPM-Europe and the European Regional Veterinary Command, bringing its total number of personnel to 400 Soldiers and civilians stationed in six different countries. PHCR-Europe provides support to forward-deployed bases that maximizes force health protection and meets joint medical surveillance requirements. Occupational health nurses coordinate the medical surveillance of local national workers and perform worksite visits to ensure compliance with applicable standards for personal protective equipment. Local laboratory services generate timely, scientifically sound public health surveillance-related biological, environmental and veterinary diagnostic laboratory data.

Public Health Command Region-Pacific delivers regionally focused support to Pacific combatant commanders, major commands, major subordinate commands and medical treatment facilities. The PHCR-Pacific area of responsibility encompasses approximately 50 percent of the earth's surface and more than half the world's population. Its personnel are assigned across seven time zones. Laboratories provide analytical chemistry and vector-borne disease surveillance services to installations and units in its area of operations. Veterinarians ensure the safety, security and wholesomeness of food and water for all Soldiers, Marines, Sailors, Airmen, civilians and family members serving in the Pacific. Services include providing veterinary medical care and veterinary public health, food safety and food defense in support of all DOD agencies within U.S. Pacific Command. ▲

USAPHC organizational structure

This chart includes the USAPHC's headquarters, regional public health commands and their districts, the Army Institute of Public Health, and the executive agencies to which the USAPHC provides administrative support.



NOTE: Installations specified in parentheses represent the command group location, not units conducting short- or long-term split operations, e.g. HQ, PHCR-North, and PHCR-Pacific.

* Executive agencies receive administrative support from USAPHC, but the Army surgeon general oversees them.

** The USAPHC commanding general also serves as the Functional Proponent for Preventive Medicine.

Portfolio operations: Oversight and quality control

Portfolio directors and program managers at the Army Institute of Public Health oversee and ensure the quality of the work in their scientific and technical areas being performed from the level of the institute to the regional level all the way to the point-of-service level. They collaborate with USAPHC's service providers to ensure that they are trained, credentialed and resourced to perform services within their technical areas.

- ▶ **The Environmental Health Engineering Portfolio** assesses, maintains and improves Soldier environments to advance readiness, health and sustainability. The portfolio has environmental capabilities in the areas of air and water quality, solid and medical waste, operational noise hazards, and entomology and pest management.
- ▶ **The Epidemiology and Disease Surveillance Portfolio** studies disease and injury and the risk factors associated with them. Its work represents the founding element of public health—disease prevention and control. Recently the portfolio has added surveillance and field study capabilities in the areas of behavioral and social health.
- ▶ **The Health Promotion and Wellness Portfolio** develops and evaluates products and services that will maximize health, fitness and readiness, and enhance the efficiency and productivity of customers. The portfolio standardizes and replicates Army wellness centers; provides advisors to installation commanders' Community Health Promotion Councils; develops and consults on the development of health and behavioral health educational products; and evaluates and advocates for quality health promotion practices at Army locations.

▶ **The Health Risk Management Portfolio** provides comprehensive health risk management and expertise to worldwide military commanders, decision-makers and military preventive medicine personnel to ensure and enhance their readiness. Health risk management is the science and art of identifying, evaluating, selecting, documenting, and implementing measures to reduce or prevent risk to human health. Members of the HRM portfolio "go anywhere troops go" to help examine, assess and report the environment and associated health risks from potential and known exposures and assist researchers and health professionals in assessing and evaluating veterans' health problems as a result of these exposures.

▶ **The Laboratory Sciences Portfolio** at the AIPH provides a full spectrum of environmental and occupational laboratory support services for Army, DOD and other government customers. Laboratory experts provide 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 the workplace or the environment. The laboratory at AIPH 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 tsunami of 2011.

▶ **The Occupational and Environmental Medicine Portfolio** provides leadership and professional consultative services to medical providers about military occupational and environmental medicine, vision conservation, hearing injuries, and injury or illness from chemical, biological, radiological, nuclear and explosive materials. Elements of the portfolio serve the Army and the DOD with the goal of preventing illness and injury that occurs in the workplace or work environment, both deployed and in garrison.

(Top) Deployment environmental surveillance backpack

(Middle) Ergonomic services in the workplace

(Bottom) Geographic Information Systems

USAPHC photos

▶ **The Occupational Health Sciences Portfolio** fosters the prevention of workplace exposure-related injury, disease and death by providing a wide range of occupational health and injury prevention services for Soldiers and the civilian workforce, commanders, policy-makers, and the Army's medical leadership. This is accomplished through the anticipation, recognition, evaluation, and control of exposure to chemical, physical and biological stressors.

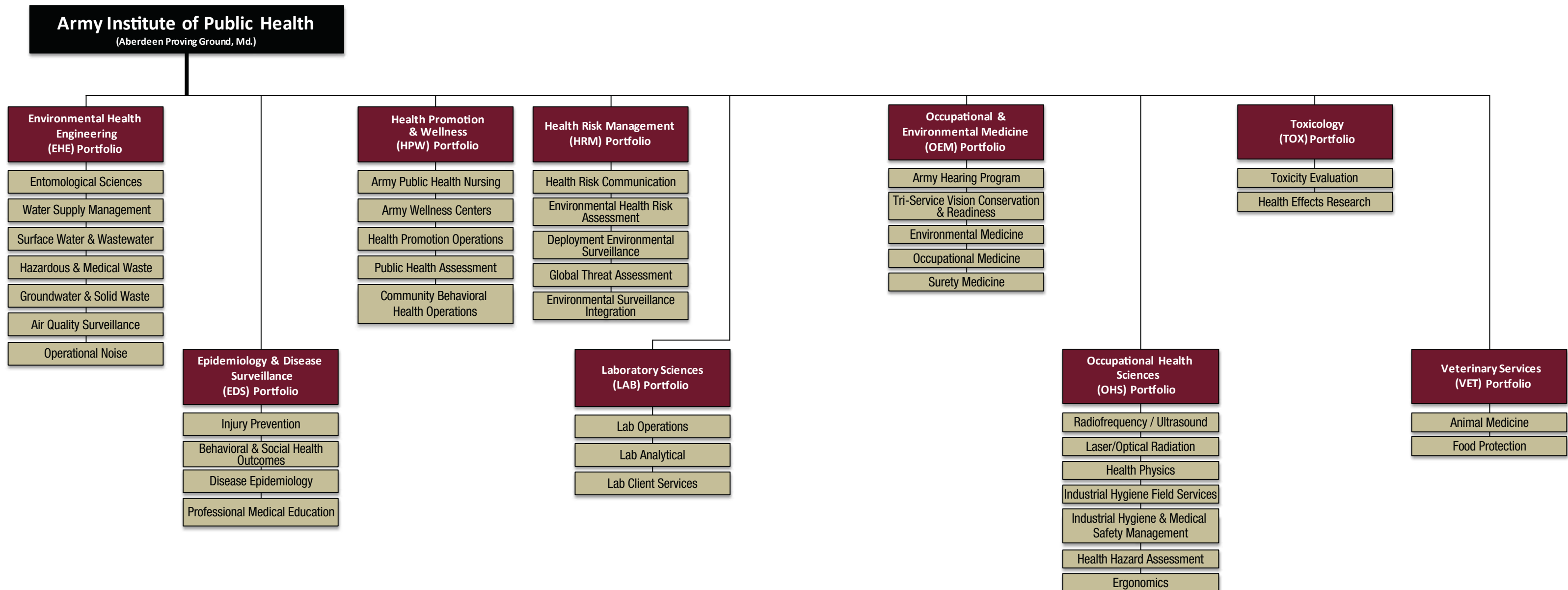
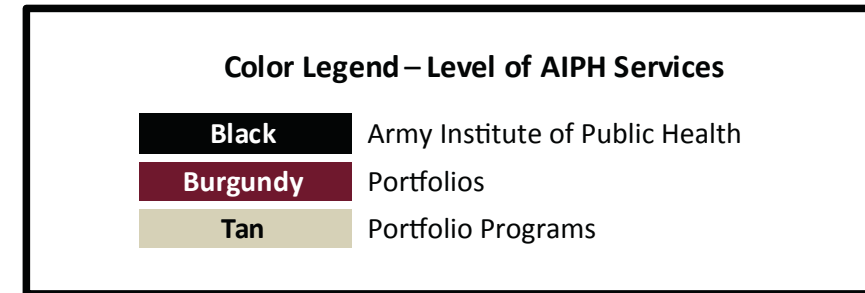
▶ **The Toxicology Portfolio**, in collaboration with other DOD and government agencies and private entities, provides expert consultation in understanding the potential for adverse effects from the use and subsequent exposure of Army materials. It specializes in identifying the toxicology of military-unique chemicals and compounds to determine the safety of those proposed for use by the Army and DOD in such things as explosives, ammunition, equipment and other materiel. The work performed has a significant impact on operational readiness and sustainment because it continually evaluates emerging products and compounds to keep DOD employees and their environment safe.

▶ **The Veterinary Services Portfolio** works with the USAPHC's human disease surveillance experts to monitor and control diseases transmitted from animals to humans. The portfolio performs this mission through preventive care, animal handler/owner education, and animal treatment. Its second mission is protecting military personnel and their families from food-borne disease through surveillance, auditing and assessing vulnerabilities. Through its animal medicine and food safety and defense programs, the Veterinary Services Portfolio strengthens the USAPHC's ability to monitor, assess, mitigate and control human disease threats from military working animals, beneficiary pets and the environment. ▲



AIPH organizational structure

This chart details the structure of the Army Institute of Public Health, comprised of nine portfolios that oversee mission executions and ensure quality throughout the USAPHC in their areas of scientific and technical expertise.



Regional laboratories: Extending analytical capability

In addition to the Army Institute of Public Health, laboratories are also located at the U.S. Army Public Health Command's regional public health commands. They provide a variety of services to support specific needs of customers in their areas of operation. Several USAPHC laboratories around the world also provide veterinary laboratory services for the DOD.

The Public Health Command Region-Europe Department of Laboratory Sciences is a full-service laboratory specializing in drinking water compliance, environmental quality, industrial hygiene, occupational health, radiation protection, food safety and veterinary diagnostic services. Its primary mission as a forward-deployed public health laboratory is to support public health programs of the U.S. European Command, U.S. Africa Command and U.S. Central Command theaters of operations.

The laboratory has a highly trained professional staff and a proven history of quality and leadership in the analysis of food, water, sediment, sludge, soil, biological, veterinary and industrial hygiene-related matrices. It provides comprehensive services through its modernized facilities and network of accredited contract laboratories.

Located at Public Health Command Region-Pacific, the newly established Presumptive Radiological Analysis Laboratory performs a presumptive spectroscopy analysis of water, soil and food product samples. The presumptive laboratory identifies possible radionuclides in each sample. Any sample containing radionuclides above set action limits is sent to the AIPH laboratory or another accredited laboratory for further analysis.

The PHCR-Pacific Division of Laboratory Sciences is a full-service laboratory specializing in environmental analytical chemistry. Its primary mission is to support programs in the U.S. Pacific Command area of operations. The division consists of the Environmental Laboratory that specializes in drinking water analysis compliance testing and the Disease Surveillance Laboratory, which monitors disease throughout the Pacific. The laboratory is transforming to assist in the food-protection mission by expand-

ing capabilities to include analyzing for alpha/beta radionuclides, microbiological contamination in food and bottled water. For those analyses that cannot be performed in-house, reach-back capability to the AIPH or other continental U.S. laboratories or local contract laboratories is available.

After the Japan earthquake and tsunami, the Public Health Command District-Japan Food Surveillance Laboratory at Camp Zama conducted microbiological testing of audited plant products, in addition to increased testing of other food products throughout the area of operations due to concern about increased microbial contamination. Working weekends and most evenings, the laboratory produced 456 results of microbiological indicators of potential contamination. Of these, 29 test results yielded exceeded action limits, indicating the need for immediate sanitation improvements to the identified facilities or facility areas. Collaborating with the PHCR-Pacific laboratory ensured safe food and water were available for military personnel during this emergency.

PHCR-North Laboratory Sciences employs state-of-the-art molecular techniques to identify and analyze samples for a worldwide suite of vector-borne diseases of human and veterinary importance. Samples are received and analyzed from the continental U.S. as well as foreign locations where troops are deployed. Analysis results are intended to help facilitate force health protection decisions. Target organisms include but are not limited to viruses like West Nile and eastern equine encephalitis, bacterial agents like those that cause Lyme disease, and parasites like those causing malaria.



The DOD Food Analysis and Diagnostic Laboratory, located at PHCR-South, is an accredited public health laboratory that provides services to support force health protection through scientifically sound, timely and accurate testing. The laboratory also provides technical consultation to the DOD on integrating laboratory testing and food safety into science-based inspection systems. The FADL is composed of the Diagnostics Section, Food Microbiology and Chemistry Sections, and Cholinesterase Reference Laboratory.

The Diagnostics Section supports the health and combat readiness of military working dogs worldwide and the international travel of pets belonging to military families. The Food Microbiology and Chemistry Sections ensure food safety, fitness for consumption, and contractual compliance through microbiological, chemical and toxicological testing of food and bottled water.

Samples include dairy products, meat and fish products, prepared salads and sandwiches, operational rations, animal feeds, canned/package foods, fresh fruits and vegetables, cosmetics, vitamins and drugs.

The CRL provides occupational health medical surveillance and a database repository in support of the DOD Chemical Surety Program. It also ensures cholinesterase-testing standardization within the Cholinesterase Monitoring Program. The program ensures proper occupational health monitoring of personnel engaged in chemical agent stockpile/demilitarization operations, chemical agent defense research and installation pest management. Quality assurance oversight, comparative analysis, proficiency testing and on-site compliance inspections are provided to 10 satellite laboratories engaged in red blood cell-cholinesterase testing. ▲

The Army enterprise approach to public health

THE U.S. ARMY PUBLIC HEALTH COMMAND HAS ADOPTED the Army “enterprise approach” to managing the delivery of public health services by the Medical Command Public Health Enterprise. An enterprise is made up of different commands or organizations that share common missions—it reaches across organizational boundaries. While the enterprise approach, which originated in the business world, has been accepted by the Army leadership, it is new to most Army organizations. The USAPHC and its partners are among the first Army organizations to test this way of doing business, which requires flexibility and continuous two-way communication to adapt and succeed.

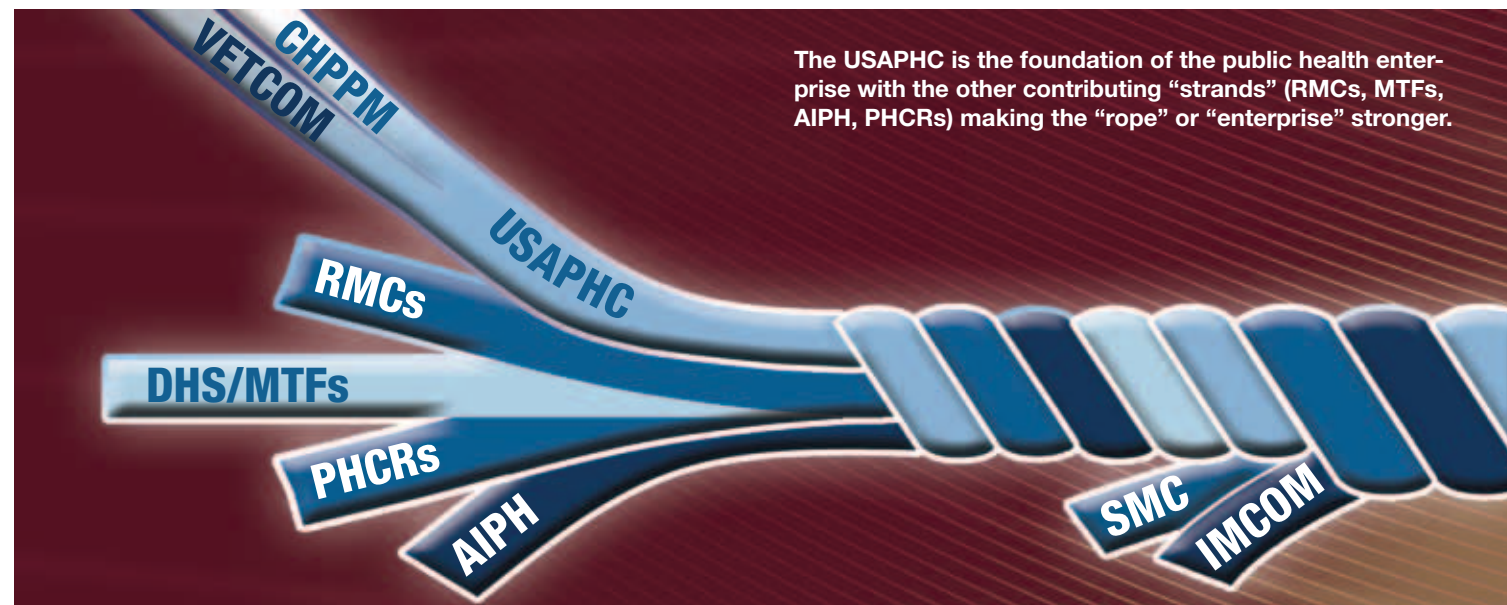
The enterprise approach allows organizations to work collaboratively and cooperatively to support common missions. It provides a common strategic direction, ensures common objectives are met, manages risks appropriately, and maximizes responsible use of resources. The enterprise approach employs non-traditional relationships in addition to the traditional military system of command-and-control to encourage decision-making at the lowest feasible level. It allows people in different organizations to work together directly within an agreed-upon framework and inform their military chains of command of what they have done or the decisions they have made. They can agree on what work needs to be done without issuing formal operational orders or taskings. In these ways the enterprise approach improves efficiency, responsiveness and communication.

In the Medical Command Public Health Enterprise, the USAPHC is the single accountable agent and has primary

responsibility for ensuring MEDCOM public health missions are completed successfully. The USAPHC is responsible for setting public health goals and priorities in consultation with its MEDCOM partners, funding public health activities, and standardizing public health practices across the Army according to proven, sound science. The MEDCOM commander has given USAPHC these authorities to ensure the MEDCOM Public Health Enterprise moves in a synchronized manner toward common goals.

However, USAPHC shares the responsibility for executing public health missions with the other MEDCOM major subordinate commands, especially the five regional medical commands and their medical treatment facilities. The RMCs and MTFs also have public health personnel assigned to them to provide installation-level public health services. The USAPHC’s regions align with the RMCs, and its districts align with MTFs since installation public health missions are shared between veterinary services personnel (assigned to the USAPHC) and preventive medicine personnel (assigned to the MTFs). This alignment helps foster enterprise relationships.

The shared mission execution across what are called “horizontal” enterprise relationships (as opposed to “vertical” chain-of-command relationships) uses coordination and collaboration as the foundation for working in partnership. Coordination and collaboration support informed decision-making, efficiency, responsiveness, and increased trust and cooperation across the MEDCOM Public Health Enterprise, ensuring that the RMCs and USAPHC work together as an efficient, effective team to meet their mutual public health missions. ▲



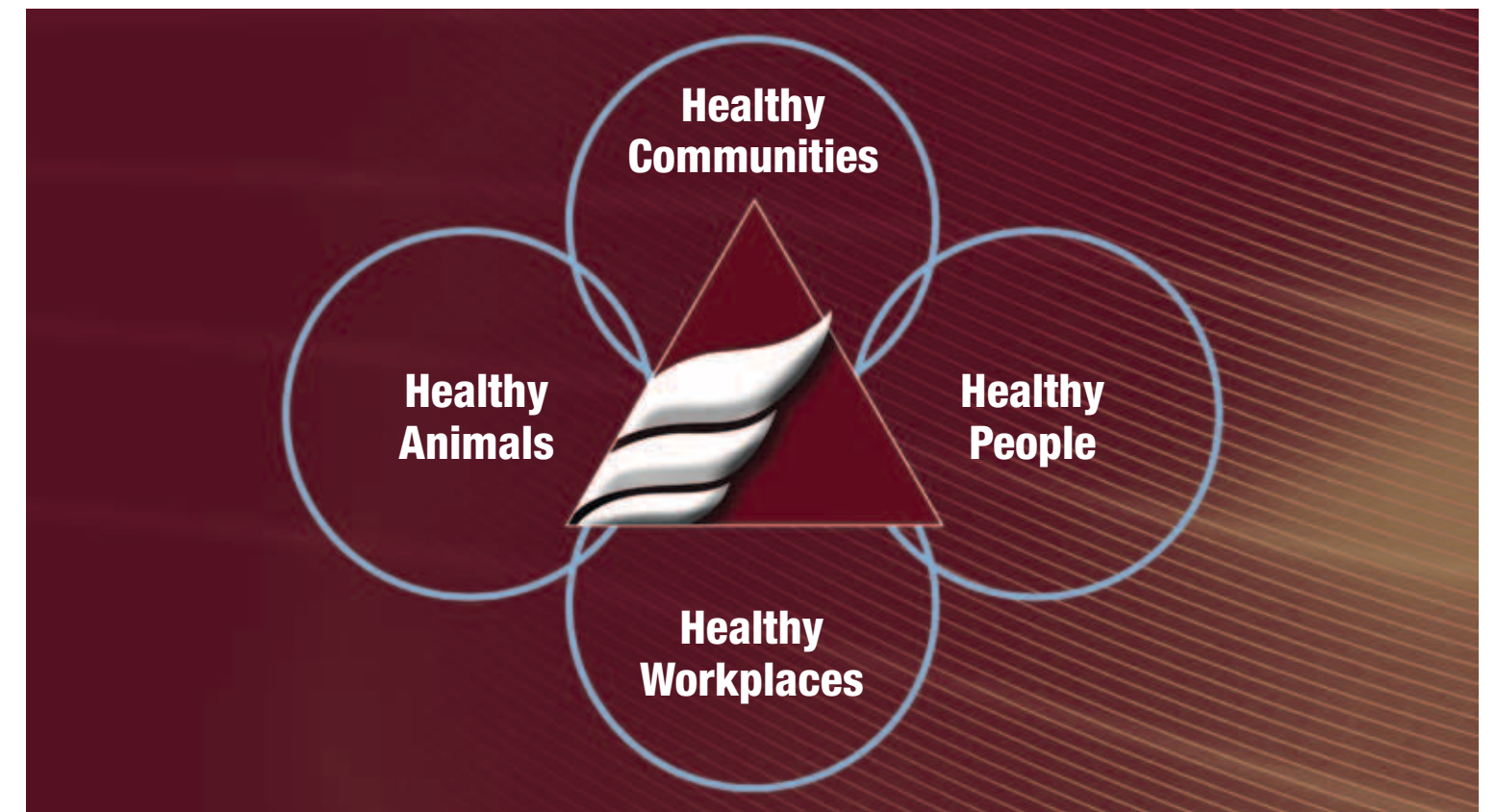
The enterprise approach and portfolio management

THE U.S. ARMY PUBLIC HEALTH COMMAND’S ENTERPRISE approach provides the framework for setting public health goals and priorities and for executing missions by Medical Command Public Health Enterprise partners. The USAPHC’s portfolio structure supports enterprise strategic goals and priorities by providing a standardized, disciplined way of prioritizing, funding and executing public health missions. Therefore, the two are linked, and without the link, the risk increases that the “right” work will not get done and non-synchronized or low-priority work will consume scarce resources.

A portfolio facilitates effective management of work first by combining groups of related programs together. Specific strategic objectives determine the pieces or programs that make up the portfolios. An analogy is an investment portfolio where the mixture of investments may change as the investor gets closer to achieving a goal; this same idea applies to the portfolio management process. The strategic objectives may change, which may drive change in the organizational structure (number or kind of portfolios) and the makeup of each portfolio (programs). The portfolio management concept encourages maximizing resources and prioritizing current and future work to continue to meet required enterprise objectives.

Portfolios provide standardization of practices (through policy, regulation and guidance), resource allocation and mission priorities from the top (of the organization) down, and mission execution from the bottom up. On an annual basis, the USAPHC’s Army Institute of Public Health portfolio directors build a work plan for the upcoming fiscal year by consulting with all Medical Command Public Health Enterprise partners to gather requirements and customer needs. They then coordinate with MEDCOM and USAPHC senior leaders to ensure a well-balanced, executable plan is ready at the beginning of the next fiscal year. Once their plan is approved, the work is authorized, scheduled and executed. By building an annual work plan, portfolio directors are able to identify and validate/revalidate resource requirements necessary to successfully execute their mission priorities. At the end of each annual cycle, the portfolio process is reviewed and evaluated for potential improvements.

This portfolio management approach does not change the way customers request public health services, but it does provide a better system of managing and overseeing customer services as well as more transparency in coordinating and delivering services to the customer. ▲





Crunching the numbers

647 Persons deployed to 100 countries

42 Military public health policy regulations developed

362 Training courses/workshops presented

243 Oral/poster presentations

56 Peer-reviewed publications

2,500+ Technical survey reports for customers

617 In-depth project studies completed

675 Short survey reviews conducted

14 Epidemiological consultations/field investigations

67 Disease and health conditions of military interest monitored

18,685+ Diseases/health conditions monitored and reported

87,154 Laboratory samples processed

11 Toxicology technical reports

34 Toxicity clearances

509,860 Privately owned animal care visits

2,908 Number of military working dog patients

1,956 Commercial sanitation audits

5,000+ Installation food activities supported

\$7 million+ Value of operational rations inspected

2,900+ Ectoparasites (ticks, fleas, etc.) identified

7,220+ Tests for disease pathogens (viruses, bacteria, etc.)

47,000+ Arthropods identified

4 Army Wellness Centers (PHCR–Europe)

7,272 Fitness assessments

4,968 Metabolic assessments

4,608 Wellness education classes

3,636 Blood pressure screenings

936 Biofeedback sessions

Unique in Army Medicine

USAPHC is a subordinate command of U.S. Army Medical Command, but it is unique among MEDCOM organizations in these ways:

- ▶ Its “patients” are populations, that is groups of people—military units or the families on an installation, for example—rather than individuals.
- ▶ It emphasizes prevention of disease, injury and disability rather than healing these conditions after they occur.
- ▶ It is proactive, optimizing health by educating members of the Army population about healthy behaviors, empowering them to build and sustain their own good health.

The “Crunching the numbers” chart at right shows our unique mission capabilities as performed in 2011.



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usaphc-pao@amedd.army.mil
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