



### Commander:

Maj. Gen. Jimmie O. Keenan

### **Public Affairs Officer:**

Lyn Kukral

### **Editor:**

Jane Gervasoni Public Affairs Office

### Staff Writer:

Chanel S. Weaver Public Affairs Office

### Graphic Designer:

Jason Embrey Visual Information Division

# Photography:

Graham Snodgrass Visual Information Division, unless otherwise noted

(COVER) Army Surgeon General Lt. Gen. Patricia D. Horoho strides to the Performance Triad Workshop after a helicopter flight to Aberdeen Proving Ground, Md. Horoho's efforts to transform Army medicine to a "system for health" focus on prevention and health promotion within the framework of the Triad: sleep, activity and nutrition. Her enthusiasm for helping America's Sons and Daughters build and sustain good health infected the 80-plus workshop attendees she charged with finding the way to change minds and behaviors.

# **FOCUS**

- 3 'Performance Triad' to change focus of Army Medicine
- 6 MEDCOM CSM summit hosted by USAPHC

# **UPDATES**

- 8 PHCR-North welcomes new commander
- 8 Stevenson takes command at PHCR-South
- 9 Army Wellness Center launched at Carlisle Barracks
- 10 News and notes from around the command

# **HIGHLIGHTS**

- 13 Tomodachi registry aids Japan's DOD population
- 16 USAPHC ensures food safety
- 18 USAPHC completes health hazard assessment of ballistic underwear
- 19 Targeting shoot house hazards
- 20 Teaching the teachers: USAPHC supports STEM outreach

# **PEOPLE**

- 22 Soldier gets national award for giving back to community
- 24 Callison named occupational therapy consultant
- 24 Preventive Medicine Master Divas win at Army 10-Miler



One Health is an authorized publication for members of the U.S. Army Public Health Command. Contents of One Health are not necessarily the official views of, or endorsed by, the U.S. government or the Department of the Army. The editorial content of this publication is the responsibility of the USAPHC public affairs officer. Contact the staff at 5158 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5403, 410-417-2349 (editor) or 410-436-1770 (PAO), or e-mail usaphc-pao@amedd.army.mil.

# 'Performance Triad' to change focus of Army medicine

USAPHC PUBLIC AFFAIRS OFFICE



he energy level in the Myer Auditorium at Aberdeen Proving Ground–North escalated as Maj. Gen. Jimmie O. Keenan, commander of the U.S. Army Public Health Command, took the stage to address attendees at the opening of the Performance Triad Workshop Sept. 19–21.

"We are here because we are concerned about the state of the health of America's Sons and Daughters," Keenan said. "Innovative ideas from the Army medicine plan for a healthy force can influence the nation."

As Keenan spoke to the more than 80 experts on sleep, activity and nutrition attending the event, she explained that a cultural change needs to take place to address these worldwide health concerns.

"We are part of a microwave generation that needs to have everything happen quickly, but obesity and other health concerns can't be addressed overnight," stressed Keenan. Lt. Gen. Patricia D. Horoho, Army surgeon general, conceived the idea of the Performance Triad.

While deployed to Afghanistan in 2011, Horoho noted that many Soldiers suffered from sleep deprivation. They found it hard to get more than four hours of uninterrupted sleep. For many, the inability to sleep well for the recommended seven to nine hours carries over after redeployment, she said. Healthy activity—physical, mental and spiritual—was disrupted by a host of factors including operations, the threat of attack, available recreation options and individual motivation. While food in the dining halls at fixed bases was plentiful, many high-fat and high-calorie choices were offered alongside more healthy options.

Horoho also realized that many of the issues deployment raised about the Triad weren't exclusive to the Army.

"People are grappling with these questions around the globe, and (the idea of the Triad) resonates with everybody I've talked to," she said at the September workshop. "What we come up with here has got to be something that an individual can grasp, and a leader can grasp. ... It should be a framework for a unit, a command, a Soldier and a family, and it should be something they can incorporate into their lives."

She also realized that both mindsets and behaviors needed to change. She demonstrated her commitment to the Triad by spending two days at the workshop, addressing the nutrition, activity and sleep breakout groups, offering encouragement to them as they develop workable task action plans to improve the three "legs" of the Performance Triad for Soldiers and retirees, their families and Army civilians.

Horoho was asked about the role of the USAPHC in the Performance Triad.

"You (USAPHC) are the on the cutting edge of where we need to go. You lead the effort—the mission is health and transforming from a healthcare system to a system for health. There is no better command to lead us (Army medicine) in doing that. I am looking to you. This is a critical opportunity for you and for us," she said.



She went on to explain the importance of the Triad. "I am so excited to be here at this moment in our history," Horoho told attendees. "You are drivers of change for the Army. We need to give our Soldiers

history," Horoho told attendees. "You are drivers of change for the Army. We need to give our Soldiers choices so that it is easier for them to be healthy than unhealthy."

Horoho is convinced that people need support, information and education well beyond what can be provided in a clinical setting, in what she calls "the life space."

"We know that on average our beneficiaries see a healthcare provider five times a year, for 20 minutes a time—a hundred minutes," Horoho explained. "We impact the individual's life with care, but not their health."

Where health really happens, Horoho said, is in the other 525,500 minutes per year. What Army healthcare beneficiaries are doing in those other 525,500 minutes is working, thinking, training, spending time with family and friends (activity). They're also foodshopping, cooking, eating and drinking (nutrition). When they're not engaged in activity or nutrition, they're sleeping. This is the life space.

(LEFT) Laura Mitvalsky, director of the Health Promotion and Wellness Portfolio, revs up attendees at the opening session of the Performance Triad Workshop. Mitvalsky also led the Nutrition breakout group.

(RIGHT) Experts from academia and the Department of Veterans Affairs collaborate with Army Medical Department staff, clinicians and researchers to define and implement the Performance Triad of sleep, activity and nutrition. The Triad, which is the approach that will be used to build and sustain health, is the approach the Army Medical Command will use in shifting focus from a healthcare system to a system for health—a system built on prevention and health promotion.

"We need to get people to think about what they are doing," she said. "We all mean well, but we all want instant results. It (improving and maintaining health) isn't that easy—it really takes how we, individually, look at activity, nutrition and sleep."

The workshop brought together medical and scientific experts from fields as diverse as sports medicine, exercise physiology, physical therapy, psychology, public health, clinical medicine, medical research, health promotion, dietetics, molecular biology, marketing and management. They were from DOD, the Department of Veterans Affairs, the American College of Sports Medicine and other non-profit and private sector organizations, and from academia. Some of their names appear on the covers of books, in scientific journals and in the popular press.

Keenan, praised her staff members at the USAPHC headquarters who provided public health expertise and planned the workshop as she seconded Horoho's vision of influencing the health of the Army and the nation.

"We need to help our Soldiers make a cultural change, and the work by the members of the Performance Triad will be the tip of the spear for this change," she said.

# Changing minds and behaviors

Workshop attendees had broad suggestions to achieve change:

- Education and training—Some examples include validated tools to assess health information, health product marketing and study results; training in scientifically proven fitness and performance methods.
- Reliable, Army-provided or -sanctioned sources of information, preferably easy to access and use, in formats that leverage current technologies.
- Top leader support and example.
- Clear, consistent messages about what to do, when and how often to do it, and the whys behind good health practices.
- Practice and policy based in sound ("evidence-based") science.





# CSM SUMMIT

**JANE GERVASONI** 

**USAPHC PUBLIC AFFAIRS** 

welve of the highest ranking and most experienced U.S. Army Medical Command non-commissioned officers, along with senior active-duty and Reserve representatives, met Aug. 20–21 at Aberdeen Proving Ground, Md., to discuss concerns facing Soldiers and develop courses of action. The U.S. Army Public Health Command hosted the meeting of senior MEDCOM NCOs.

USAPHC Command Sgt. Maj. Gerald C. Ecker took this opportunity to explain how the USAPHC mission of preventing disease and injury and promoting public health aids leaders and Soldiers by providing tools to support Army wellness. He talked about the development and use of a leadership tool, the Soldier Leader Risk Reduction Tool, that assists leaders to recognize risk in Soldiers and options to mitigate the risk. This tool was used Army-wide as part of the September suicide stand-down.

The increased rates of suicide among Army personnel is a topic of great concern to the attendees. As they discussed training and other possible suicide prevention measures, these leaders shared methods of helping to stop these tragedies.







(OPPOSITE PAGE) Command Sgt. Maj. Gerald C. Ecker, U.S. Army Public Health Command, the host of the summit, pulls together his thoughts before addressing the group.

(TOP) Sgt. 1st Class Marc Rattigan, USAPHC, briefs attendees on recent products developed by the Behavioral and Social Health Outcomes Program.

(MIDDLE) Sgt. Maj. Exerline Drumm, executive assistant to the command sergeant major, U.S. Army Medical Command, explains her suggestions to better support Soldiers.

(BOTTOM) MEDCOM's senior non-commissioned officers discuss recent policy changes.

MEDCOM Command Sgt. Maj. Donna A. Brock suggested that a comprehensive focus on wellness could help to prevent suicides. She said that as leaders, they must be aware of the needs of their Soldiers.

Others agreed and said that leaders need to be involved with Soldiers and to use the opportunity of a slower operations tempo to get closer to them. They discussed the importance of peer-to-peer interaction among Soldiers as a first line of defense.

Advances in technology such as "smart" phones, Facebook and Twitter were discussed as possible options to meet Soldiers where they live. Leaders felt that by using the technology their Soldiers used they would have more opportunities to communicate openly and honestly.

The need for communication in many areas was determined to be an important factor in dealing with Soldiers. Leaders felt the need to look for mentoring opportunities and provide guidance to help Soldiers develop the qualifications needed to compete for the assignments for which they are best

Attending this event was Fredricke Clayton, a former MEDCOM command sergeant major who is currently an executive operations specialist to the MEDCOM command sergeant major. Clayton has worked with Soldiers as both an NCO and a civilian and contributed a historical perspective to the discussions.

He praised those who attended the event for their dedication to Soldier health and encouraged them to continue focusing on prevention and helping the Soldiers they lead.  $\triangle$ 

# PHCR-North welcomes new commander

JANE GERVASONI USAPHC PUBLIC AFFAIRS



Col. Michael R. Bell, incoming commander of PHCR-N, receives the unit's colors from Maj. Gen. Jimmie O. Keenan, commander of USAPHC. (Photo by Phil Grout)

rom an artilleryman to an intelligence officer to a command surgeon in Afghanistan, Col. Michael R. Bell has held a variety of positions during his 27-year Army career. Bell added another credential on Aug. 28, when he took the reins of the Public Health Command Region–North. Col. Bradford W. Hildabrand, who commanded the organization for a year, passed the unit's colors to Bell during a change of command ceremony at Club Meade, Fort Meade, Md.

"Today we bid a fond farewell to Col. Brad Hildabrand, who is an outstanding officer and dedicated leader, and we welcome Col. Mike Bell, a veteran of the Public Health Command team and also an officer of proven ability who will carry forward the critical mission of Public Health Command Region–North," said Maj. Gen. Jimmie O. Keenan, commander of the U.S. Army Public Health Command, who spoke at the ceremony.

PHCR-North has the mission of providing regionally focused preventive medicine, veterinary service and health promotion support for the Army in a 20-state area, from Maine to North Carolina and as far west as Wisconsin. The region consists of approximately 500 personnel who serve at three Public Health Command Districts at Fort Belvoir, Va., Fort Knox, Ky., and Fort Eustis, Va.

(Information for this article came from Brandon Bieltz, Fort Meade Soundoff.)

# Stevenson takes command at PHCR-South

**CAPT. ANTHONY ROBINSON** 

PHCR-SOUTH
UNIT PUBLIC AFFAIRS REPRESENTATIVE

aj. Gen. Jimmie O. Keenan, commander, U.S. Army Public Health Command, hosted a change of command ceremony July 27 at Fort Sam Houston, Texas. Outgoing commander Lt. Col. Deydre S. Teyhen relinquished command of Public Health Command Region–South to Col. Timothy H. Stevenson.

Keenan praised Teyhen's leadership in strengthening and mentoring the force. "Lt. Col. Teyhen was able to successfully merge the various organizations within the PHCR-S family and ensured that everyone was included using social media as the primary vehicle to bring people in, get them involved and keep them involved," Keenan said.

"When Col. Stevenson picked up the guidon today, I told him you're not going to miss a beat, you're going to do a phenomenal job. You are a caring leader who puts people first in everything that you do," she added.

Stevenson is a veterinarian whose last assignment was as commander, Great Plains Regional Veterinary Command. He also served as commander, Southern Europe Veterinary Detachment, Vicenza, Italy, and commander, Veterinary Laboratory–Europe.

PHCR–South provides public health leadership and evidence-based preventive medicine programs and veterinary services to optimize health of military units, installation personnel and animals within 11 Southeastern states, the Caribbean and Central America. The Food Analysis and Diagnostic Laboratory, Cholinesterase Laboratory, and the DOD Military Working Dog Veterinary Service are part of PHCR–S.



Lt. Col. Deydre S. Teyhen, outgoing PHCR-S commander, Maj. Gen. Jimmie O. Keenan, USAPHC commander, and Col. Timothy H. Stevenson. (Photo PHCR-S)

# **Army Wellness Center launched at Carlisle Barracks**

LYN KUKRAL

USAPHC PUBLIC AFFAIRS OFFICER

Army Wellness Centers offer

services that help achieve

lifestyle change and prevent

chronic diseases ...

THE FOURTH CONTINENTAL U.S. ARMY WELLNESS CENTER OFFICIALLY OPENED SEPT. 14 AT CARLISLE BARRACKS, PA.

It is among the first examples of a health initiative that will help Soldiers and their families take more responsibility for their own health. At Carlisle Barracks, the AWC serves the active-duty, civilian and retiree population surrounding the post and additionally introduces the Army's future leaders attending the Army War College to health promotion and prevention services. Ir

four years, the same core services will be available to most U.S.-based Army beneficiaries.

"Army Wellness Centers offer services that help achieve lifestyle change and prevent chronic diseases like diabetes, heart disease and stroke,"

explained Todd Hoover, AWC Operations Program manager at the U.S. Army Public Health Command. "They empower people to build, sustain and manage their own good health through individualized, ongoing services that help them achieve sustained behavioral change."

AWCs are designed to fill the gap between medical appointment counseling and the ongoing support Army beneficiaries need to make lifestyle changes that stick. Wellness center services include metabolic testing, exercise testing and prescription, stress management and biofeedback, tobacco education and referral, general wellness education and weight management. Programs are standardized and based on scientific evidence, Hoover said.

The AWC program is a U.S. Army Medical Command initiative that is managed by the USAPHC. It is a key element in the Army surgeon general's long-term strategy of refocusing Army medicine from a healthcare system to a system for health by emphasizing primary prevention, which means stopping diseases and chronic conditions before they start.

"It is such an accomplishment to open this center, which provides the tools to empower this community to prevent disease, improve health and, ultimately, quality of life," said Col. Stephanie Wilcher, commander of the Dunham Army Health Clinic.

"Today, we begin to change the consequence of preventable disease through education and programs that focus on health," said Wilcher. "Pre-diabetes does not have to become diabetes. Obesity does not have to become cardiac disease. We can make a difference and save many the human burden of disease."

Medical treatment facilities like Dunham manage AWCs. Wellness centers are staffed by nurse- and health-educators who document client visits to the centers in the client's medical record. Physicians give direction and oversight, and follow patient progress through the medical record. As more AWCs stand up, the records of Soldiers and their families will follow them as they move from duty station to duty station.

AWCs operate as a partnership among installations, medical treatment facilities and the USAPHC as MEDCOM's program manager for AWCs. That partnership was reflected in the dignitaries and attendees the Carlisle Barracks opening ceremony.

Maj. Gen Richard Stone, the Army deputy surgeon general, joined Wilcher; Brig. Gen. Joseph Caravalho, the commander of Northern Regional Medical Command; Col. Bobby Towery, the deputy commandant of the Army War College; John Resta, the USAPHC deputy to the commander for public health; and other leaders and members of the MED-COM, Army War College and garrison to officially open the center.

"At the community level, Army Wellness Centers are partnerships with the senior installation commanders, and at the human level, they offer an individualized, holistic approach to health that incorporates body, mind and spirit," said Laura Mitvalsky, the USAPHC's Health Promotion and Wellness Portfolio director. "Together, we are changing the way the Army approaches how we execute health care—moving from a healthcare system to a system of health."

A total 38 wellness centers are planned by the end of fiscal 2017. In addition to USAPHC-overseen centers in the continental U.S., seven centers are operating on Army posts in Europe.

(Information for this story was provided by the Army War College Public Affairs Office.)



Army Wellness Centers will perform health assessment reviews that give an analysis of a person's health status, risk for disease and ability to increase physical activity safely.

# NEWS AND NOTES FROM AROUND THE COMMAND

The U.S. Army Public Health Command Rabies Response Team won the first annual Army Medical Department Wolf Pack of the Year Award. The team was selected in a tough competition among the four winners of the quarterly awards for this year, the Landstuhl Regional Medical Center Traumatic Brain Injury Program, the HQ U.S. Army Medical Command BizOps Bowl Team, the Carl R. Darnall Army Medical Center Skills/Knowledge Fair Committee, and the USAPHC Rabies Response Team. The Wolf Pack Award recognizes exceptional teamwork by an integrated group of military and civilian team members focused on excellence in support of Army medicine.

The USAPHC safety manager reported that, for the third year in a row, there have been no serious accidents resulting in death or permanent disability across the command from the headquarters down to the district/ branch level. This continues a multi-year trend in which all accidents have been reduced at USAPHC. The command encourages employees to continue their efforts to avoid accidents and injuries by practicing safe habits both at work and in the home.

The Toxicology Portfolio hosted the Tri-Service Toxicology Consortium meeting Aug. 7–8 at APG–South. Representatives from Naval Medical Research Unit-Dayton, Army Center for Environmental Health Research, Air Force Center for Environment and Engineering, Army Engineering Research and Development Center, and the Veterans Administration attended along with others from Edgewood Chemical Biological Center, Air Force School of Aerospace Medicine, and 711 Human Performance Wing/Human Effectiveness Directorate, who attended remotely via Defense Connect Online and teleconference. Attendees discussed recent mission developments (results and data needs) and opportunities to share/collaborate in a fiscally-restrained environment.

PHCR-Europe Health Promotion provided an interactive stress management and wellness class in August to 11 provost marshal personnel at the request of the provost marshal commander. The class discussed recognizing stress and managing stress, and took personnel through relaxation exercises. Personnel also discussed eating on the go and getting some exercise/activity during the duty day. The commander has confirmed that all of provost marshal personnel will go through this class.

Five Soldiers from PHCR-Europe earned the Expert Field Medical Badge after testing held Sept. 16-21 in Grafenwohr, Germany. Staff Sgt. Robinson T. Montalvo, PHCR-Europe; Capt. Annie T. Eure, Public Health Command District-North Europe; and Capt. Elliott R. Garber, Sgt. Juliane Becker, and Spc. Brian L. Patrick, from PHCD–South Europe earned the EFMB. The Soldiers recommended study, practice and physical preparation for others preparing to compete for this badge.

Ben Pagac, PHCR-North entomologist, responded to the seasonal West Nile Virus outbreak for the National Capital Region. He contact with pigs. Many of the infections apand other experts detected a positive pool of West Nile Virus from Walter Reed, Forest Glen, Md., and as of the end of September, had processed nearly 5,600 mosquitoes and detected 52 positive pools. PHCR-South **Environmental Health Engineering Division** and Food Analysis and Diagnostic Laboratory confirmed West Nile virus in mosquitoes collected from the stable on Fort Sam Houston, Texas. They are coordinating with the Southern Regional Medical Command to disseminate information and increase mosquito surveillance.

The Global Emerging Infections Surveillance Operations staff participated in a coordination forum for the Centers for Disease Control and Prevention National Network of STD/HIV Prevention Training Centers Treatment Guidelines Webinar Series targeting military populations. The discussion includ-

ed the selection of potential guest speakers (including medical professional with military background), timeline for the webinar, and marketing (targeting physicians who are engaged with military population)/planning leading to the webinar.

### The Military Vaccine Agency published its Seasonal Influenza Vaccine Curriculum.

The 2012–13 curriculum is a five-module online course that will provide healthcare personnel with comprehensive information concerning the influenza vaccine. It is designed to prepare healthcare personnel to administer influenza vaccinations and perform required administrative tasks in support of the DOD's Influenza Vaccination Program. The curriculum can be found on the MILVAX Web site at the following link: http://www.vaccines.mil/OnlineTraining/Influenza.

The Disease Epidemiology Program says that increased cases of a new influenza virus, H3N2v, have been causing mild, outof-season illnesses in the U.S. Since July, more than 276 human infections have been reported by the CDC. The vast majority of cases have been in young children who had pear to have taken place at state and county fairs. Vaccinations can help prevent flu, so to protect yourself and others consider getting flu shots as early as they are available in vour area.

Toxicology personnel briefed representatives from the Tank Automotive, Research, Development and Engineering

**Center** regarding progress on the series of environmentally friendly fire-extinguishing agent studies that the Toxicity Evaluation Program is performing and reviewing. These include aqueous agent pyrolysis testing and dry powder acid gas neutralization studies performed by the Aberdeen Test Center, aqueous agent acute inhalation toxicity testing, and acid gas/dry powder toxicity testing being performed by TEP and the Naval Medical Research Unit, respectively.

ONE HEALTH 11 *10* FALL 2012

The DOD Food Analysis and Diagnostic Laboratory Lab Sample Submission Guide 2012 is now available. This document provides guidance for collecting and submitting samples and animal specimens to the FADL, PHCR–S. The guide can be downloaded from the U.S. Army Veterinary Service Application Portal (News & Information) or from the DOD FADL Web site: http://www.vetlab.army.mil/documents/fsts\_docs.html

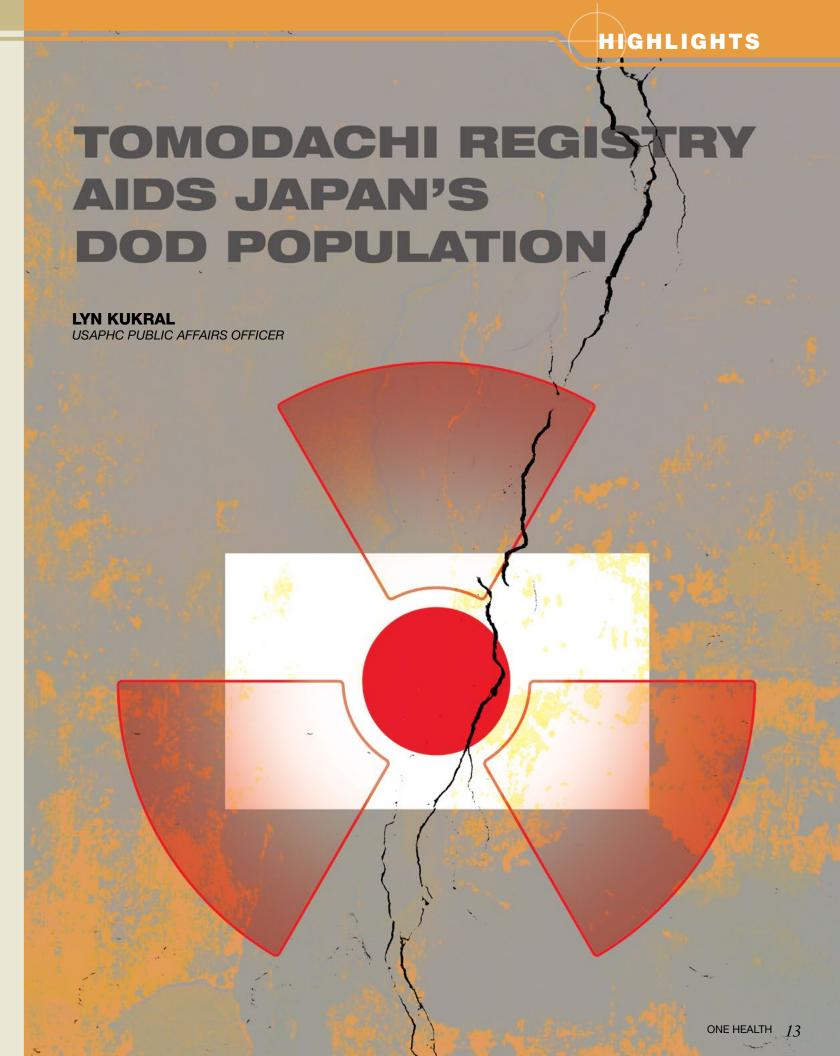
Maj. Paul Hollier, veterinarian and a drilling Individual Mobilization Augmentee with PHCD-West, on active duty with PHCD-South, has been selected to receive a RAND Arroyo Fellowship and will start in July 2013. Only five Army Medical Department officers were selected for this opportunity. This is a research and study fellowship established at the Army's federally-funded research and development center, the RAND Arroyo Center in Santa Monica, Calif., which focuses on topics related to the national security strategy and issues of critical importance to the Army. Following his one-year fellowship, he will have a three-year utilization tour on an Army staff.

Lt. Col. Margery Hanfelt, Public Health Command District–Japan's former commander, received the American Veterinary Medical Association's 2012 Meritorious Service Award. It was during her tenure as commander, PHCD–Japan, that Japan experienced the historic 2011 earthquake and tsunami, followed by the second-worst nuclear power plant disaster in history. It was her unit that provided the on-site U.S. military veterinary service support for U.S. Forces Japan and coordinated with U.S. and Japanese government agencies. The efforts of PHCD–Japan resulted in the unit receiving the Army Superior Unit Award.

Belvoir, New London Branch, was honored with the Col. Clifford L. Walker Leadership Award at the American Veterinary Medicine Conference in San Diego, Calif., Aug. 6. She completed her second deployment in March 2011 to support Operation Tomodachi following the earthquake and tsunami. Her efforts during the deployment, her high level of technical expertise, and her community service and support to the Better Opportunities for Single Soldiers Program were recognized in this Veterinary Corps award.

Master Sgt. Daniel Watford, PHCR–South, received the Order of Military Medical Merit to recognize his management of health and well-being operations in Afghanistan. The award citation also highlighted his leadership and emphasized his contributions training non-commissioned officers to lead by example in preparing Soldiers for medical operations and ensuring preparedness to go to war. Watford currently serves as the chief operations NCO.

The USAPHC-HQ softball team looked defeat in the face and then rallied with a come-back win over the 20th Support Command to win the Edgewood Division of the Morale, Welfare and Recreation Intramural Softball Championship at Edgewood, Md., Sept. 11. The USAPHC team came back from a 7-5 deficit in the top of the 7th inning to post six runs and then squash the 20th SUPCOM rally in the bottom of the inning, winning the championship 11-9.



he U.S. Army Public Health Command played a significant public health role in the aftermath of the March 11, 2011, Japanese earthquake and tsunami. USAPHC responders monitored radiation levels from the damaged Fukushima Daiichi nuclear power plant, checked the safety of water and food, and assessed search-and-rescue dogs coming into the country to assist in finding the missing.

A year-and-a-half later, it looks as though USAPHC will have a decades-long role to play through the creation and maintenance of the Operation Tomodachi Registry.

The registry's purpose is to provide general information about the incident; location-based, estimated radiation doses for the DOD-affiliated population; and a way for registry users to contact the registry staff. Launched Sept. 5, 2012, the registry currently includes estimated radiation exposure information for 13 mainland Japan locations where most of the approximately 70,000 DOD-affiliated people were during the incident.

"We used this opportunity to build a model for future exposure registries, one that's flexible enough to manage a wide range of potential environmental exposures," according to Brad Hutchens, an environmental engineer whose program lead the creation of the registry and will manage it as part of the Defense Occupational and Environmental Health Readiness System. "Development of this registry is unique, because DOD has not previously taken such a proactive approach."

One significant reason for DOD's approach was the health concern of Soldiers and family members in Japan.

"People are generally concerned about radiation," Hutchens said. "They wanted to make sure it was properly monitored and documented."

Jerry Falo, a USAPHC radiation safety expert who holds a doctorate in health physics, agrees.

"We've all seen the images portrayed in movies and on TV; they reinforce people's fear of radiation," Falo said. "We (scientists) know what happens at

high levels of radiation exposure—much higher than those seen with this accident—but at the levels seen in the DOD-affiliated population, the Health Physics Society's position statement says it best: 'Risks of (adverse) health effects are either too small to be observed or are nonexistent."

Falo was part of a working group of DOD scientists charged with estimating radiation doses in locations where DOD-affiliated personnel were present. Health effects from radiation exposure are not expected in the DOD-affiliated population.

The working group included experts in health physics, nuclear engineering, radiological health sciences and medical physics from the three U.S. military services, the Armed Forces Radiobiological Research Institute, and the Defense Threat Reduction Agency. They analyzed the radiation levels in mainland Japan from March 12 to May 11, 2011, applying U.S. standards to data gathered by multiple agencies from multiple sources.

nese government environmental data on air, water, soil and external (monitoring) measurements. We looked at breathing rates, ingestion rates and time spent outdoors," Falo said. "We took high-side EPA estimates and assumed no time indoors for 60 days—it's unlikely that a person's actual

"We looked at DOD, Department of Energy and Japa-

radiation doses would be higher than the levels described in the registry."

Registry dose estimates currently include adults by age groupings and children by age groupings. In the future, dose estimates for embryos, fetuses and nursing infants will be included.

This documentation can be used by medical providers to discuss patient concerns about potential radiation exposures they may have received during the March 12 to May 11, 2011, timeframe.

"Much is done at the time (an incident occurs) to reduce risk, take care of people and address the situation, but we haven't always created documentation for the long term," Hutchens pointed out.

By the end of the calendar year, the nearly 70,000 identified people will be entered into DOEHRS and associated to the location-based estimates.

USAPHC was selected to create the registry because of its experience in managing DOEHRS and because of its experience in creating and managing the Operation Desert Storm Kuwait Oil Well Fires project, Hutchens said. DOEHRS manages industrial hygiene, environmental health, radiation and incident reporting data for the DOD.

In addition to its technical and scientific expertise, the USAPHC contributed risk communication expertise to the development of the registry.

"I help the subject-matter experts take that incredible amount of data and translate it to what it means to service members, families and other DOD-affiliated people who were on the island or in the other designated areas at the time the registry covers," said senior USAPHC risk communicator Bethney Davidson.

As the registry was planned, transparency of communication and the provision of usable information "for years to come" were key communication goals, she added.

The Office of the Assistant Secretary of Defense (Health Affairs), Force Health Protection and Readiness is the sponsoring agency, and experts from the Defense Threat Reduction Agency, Naval Health Research Center and others contributed to the registry content.

*The registry is online at http://registry.csd.disa.mil/otr.* 

# USAPHC ENSURES



# MASTER SGT. LENNARD BOOKMAN USAPHC VETERINARY SERVICES



Veterinary food inspector performs a receipt inspection on carrots at a commissary.

One of the duties of the U.S. Army Public Health Command is to ensure that preparing and handling food safely becomes engrained in the Department of Defense culture and becomes common practice at home as well as the workplace.

"Great food safety habits can start simply and lead to a healthier lifestyle," explained Chief Warrant Officer 5 Ronald Biddle, USAPHC senior food safety officer. "Food safety begins and ends with proper hand washing."

But hand washing is just one piece in the total food safety picture.

USAPHC's Veterinary Services Portfolio provides food quality, safety and defense guidelines, policies and procedures for Army veterinary service personnel worldwide. These guidelines enable the Army veterinary food inspectors to provide their customers with a high-quality and wholesome food supply.

Army veterinary service personnel provide public health services in many locations around the world.

"They perform sanitation inspections of facilities, to include inspection of products received, stored and sold," said Biddle. "They provide these services to the Army and Air Forces Exchange Service establishments; Defense Commissary Agency establishments; Morale, Welfare, and Recreation facilities;, and troop feeding activities. These inspections are performed on Navy and Marine installations throughout the nation and abroad."

Ken Salazar, secretary of the U.S. Department of the Interior and a farmer/rancher, notes the importance of food safety and defense.

"I think it is paramount that we take proper steps to ensure the safety of our food supply and domestic livestock herd," he said.

Col. Paul Whippo, Food Protection Program manager, said Salazar's comment not only reminds individuals of how important the safety and security of the food supply is, but how it is integrated from farm to fork.

"As members of Public Health Command, we develop and implement food safety policies for the Army. We also work in support of our sister services to ensure that the DOD food supply is safe for service members, retirees and their family members," explained Whippo.

"We work with other federal and foreign regulatory agencies to make sure that we cover as much of the total picture possible. The bottom line is, without the inspector in the commissary; Troop Issue

Subsistence Agency; Meal, Ready-to Eat plant; MWR; AAFES facilities; and the auditor in the commercial plants, our system and the safety and security of our military food supply would not exist. They ensure our military forces and their families are not at risk," he added.

Military inspectors are frequently engaged in highlighting food safety and providing information to DOD personnel and their families on installations around the world.

"Visual aids such as flyers and food safety displays are placed near our military food servicing facilities," said Biddle.

The USAPHC also provides educational outreach through electronic (e-mails and presentations) and physical (information booths and posters) means to better prepare consumers to understand the importance of food safety.

"We all must be vigilant to prevent food-borne illness," Biddle emphasized.

Food-borne illnesses can be as incapacitating as bombs and bullets, and they occur in homes as well as on the battlefield.

Col. Robert Webb, director of the Veterinary Services Portfolio, is well aware of the impact that safe and quality food has on the DOD.

"It was Napoleon Bonaparte who said, 'An Army marches on its stomach,'" said Webb. "By that Napoleon meant a well-fed Army is a formidable one, and his statement is as true today as it was in Napoleon's time."



# **USAPHC** completes health hazard assessment of ballistic underwear

**CHANEL S. WEAVER** 

PUBLIC AFFAIRS OFFICE

he Army is one step closer to issuing an updated version of its ballistic underwear after a recent review and approval by the U.S. Army Public Health Command.

Experts in the command's Health Hazard Assessment Program completed an occupational health assessment of the new protective outer garments and undergarments, and provided recommendations on how to minimize any risks.

"We evaluated these items to identify any occupational hazards that could arise from wearing them," said Robert Booze, an industrial hygienist project officer at the USAPHC. "Our goal was to mitigate any risks to Soldiers before the protective outer garments and undergarments were distributed to the user."

After a thorough review, the HHA Program approved the protective outer garments and undergarments for military use.

Military work is inherently dangerous, but officials at the USAPHC believe that Soldiers in combat should not be placed at a disadvantage or at unusual risk because their protective clothing is deficient.

Although these undergarments look similar to a set of men's bicycle pants, they are no ordinary underwear.

"They are designed to use protective fabric and withstand injuries to the pelvic region that may result from the blast of an improvised explosive device," said Booze.

From 2003 to 2011, more than 600 Soldiers suffered injuries to the genital region during the wars in Iraq and Afghanistan. Although Soldiers are well protected by body armor on their torso, some injuries to the lower body are so severe that they can cause Soldiers to lose all or part of their genitals. This loss of the reproductive organs can have devastating psychological effects.

The Health Hazard Assessment Program was not the only program within the USAPHC that helped complete the assessment of the pelvic protection system.

Wilfred McCain, senior toxicologist, said the USAPHC Toxicology Portfolio conducted an evaluation of the materials that were used in the underwear to see if they posed any potential risk to the wearer's skin.

"We evaluated the fabric, and did not see any threats to the user," said McCain. "The safety of our Soldiers is a top priority."

The garments must also be comfortable, using breathable fabrics like cotton, according to specifications requested by the Army.

Booze, who once served as an infantry officer in the military, said he feels blessed to perform a job that helps ensure protection of the troops. The HHA Program reviews not just personal protective clothing, but weapons systems, equipment and training devices as well.

"I am grateful that I still have a job that allows me to support our Army in a meaningful way," he said.

Now that the USAPHC health hazard assessment is complete, the Army will conduct several more reviews before the outer garments and undergarments are adopted in the field. The Army is expected to have 75,000 pair ready this fall.



The Army is reviewing several samples of protective undergarments to provide better protection to the pelvic region when a blast occurs from an improvised explosive device. The undergarments feature removable ballistic inserts for females and males. (Photo courtesy of PEO Soldier)

# **Targeting shoot house hazards**

**JANE GERVASONI** 

**EDITORS** 

eing a Soldier is inherently dangerous. The U.S. Army Public Health Command is in the business of protecting Soldiers by making them and their leaders aware of hazards that can be avoided and helping to mitigate unavoidable hazards.

Soldiers conduct live-fire weapons and tactics training in buildings called shoot houses. These buildings are constructed to stop ammunition by impact in bullet traps or ballistic walls, but there is another danger to Soldiers in these buildings.

The danger of exposure to lead while working or training in shoot houses has long been recognized. Emphasis for action was recently added by the Office of the Deputy Chief of Staff of the Army, G-4, which issued an operations order to all installations reiterating the Army's requirement to follow the Occupational Safety and Health Administration's lead regulations. Industrial hygienists from the USAPHC were tasked to inventory Army shoot houses at active duty Army installations.

From 2001 to 2011, USAPHC personnel conducted surveys at shoot houses and found many opportunities for reducing lead exposures including control measures and other programmatic elements. Installation industrial hygienists have also evaluated local shoot houses.

"In the fall of 2011, an issue regarding employees with elevated blood leads came to the attention of the Office of the Deputy Chief of Staff of the Army, G-4," explained Alice Weber, USAPHC industrial hygienist. "We were tasked to conduct a broad scope survey of shoot houses in the Army inventory to identify the current state of health hazard evaluations and controls in shoot houses."

Lt. Col. Craig Gehrels, program manager for the Industrial Hygiene Field Services Program at the USAPHC, added, "The emphasis added to the efforts to control lead by the Army G-4 now gives us the opportunity to compile information for the first corporate view of Army shoot houses."

"We developed a questionnaire to obtain information on elements including air monitoring, ventilation systems, hygiene measures, use of personal protective equipment, and availability of protection and surveillance programs," explained Geoffrey Braybrooke, a USAPHC industrial hygienist who worked on the survey team.

The fact-finding checklists were distributed to regional medical commands via a tasker through the Office of the Surgeon General. Responses were received from approximately 28 installations on 95 active Army shoot houses located around the world.

According to Weber, responses were compiled by personnel in the USAPHC Industrial Hygiene Field Services Program to develop a corporate picture so that targeted assistance could be provided.

"There were several concerns brought to light by the questionnaires," said Weber. "Many facilities had not done air monitoring to determine the extent of possible problems. Other facilities were unsure if hazard communications training was being completed on lead hazards.

from the USAPHC were tasked to inventory
Army shoot houses at active duty Army installations.

From 2001 to 2011, USAPHC personnel conducted surveys at shoot houses and found many opportunities for reducing lead exponers.

"We have been working to provide installation industrial hygienists guidance on conducting shoot house exposure assessments and encouraging communication with their installation medical personnel, and we have developed some model lead compliance programs that can be used by range safety personnel who oversee the shoot houses," she continued.

Good first steps to help reduce exposures include improving personal hygiene by using hand washing products made specifically to remove lead prior to eating and upon leaving the shoot house training area, avoiding dry sweeping when cleaning shoot houses, and laundering uniforms at work or separately from all other clothing.

USAPHC industrial hygienists Braybrooke and Weber will continue to work with Installation Management Command (range safety) and regional and installation industrial hygienists and their medical counterparts to implement and monitor improvements to an overall lead management program for shoot houses and to raise and maintain awareness of this important hazard to Soldier health.

# Teaching the teachers: USAPHC supports STEM outreach

JANE GERVASONI EDITOR

wenty-three high school students from Maryland and Virginia and six high school teachers from Cecil County Public Schools in Maryland had the opportunity to work on leading-edge science, technology, engineering and math projects with Department of Defense scientists and engineers July 30–Aug. 10.

As part of the U.S. Army Public Health Command's support to STEM, the organization hosted two science teachers in the Epidemiology and Disease Surveillance and Laboratory Sciences portfolios. USAPHC supports STEM to help "build the bench" of future scientists and to contribute to local communities through Public Affairs' Community Relations Program.

The Defense Threat Reduction Agency's Joint Science and Technology Office partnered with the USAPHC, U.S. Army Edgewood Chemical Biological Center, the U.S. Naval Research Laboratory and the U.S. Army Criminal Investigation Laboratory to develop a two-week residential program for the students and teachers, focusing on STEM projects.

Students were divided into small groups looking at the work of mentors in areas from water quality monitoring to the design and testing of military packaging solutions, soil toxicology, forensic science, and testing of bacteria-resistant surfaces. They also had the opportunity to tour facilities including the USAPHC entomology laboratory, where they learned why Army civilian entomologists pursued STEM careers.

At a closing ceremony for the program, Maj. Gen. Jimmie O. Keenan, USAPHC commander, gave the keynote address Aug. 10 at the Clarion Hotel, Aberdeen, Md. Keenan praised the parents of the students for encouraging their children to participate in the STEM learning event. She encouraged the students to continue their studies. Keenan also commended the teachers involved with the program for their enthusiasm for STEM and hoped they would inspire their students to be involved in STEM studies.

Keenan, a nurse by profession, reminded students during her keynote address that they should consider a career in health care, taking care of America's Sons and Daughters.

"The medical community needs individuals with the schooling and smarts to be doctors, nurses, behavioral health professionals, epidemiologists, engineers, and other scientific and technical disciplines that are STEM-related," said Keenan.

Two STEM teachers spent time with technical experts at the USAPHC to glimpse the importance of these scientific and technical disciplines within a military framework. The teachers explained their experiences at the USAPHC as part of the ceremony program.

Mary Nickerson, a biology and environmental science teacher at North East High School, intended to share her new knowledge with her students. She worked with Lt. Col. Laura Pacha, Disease Epidemiology Program manager, and many others at the USAPHC to study areas from food safety to disease and injury surveillance during the two-week event.

"I want to take the things I learned back to my students," said Nickerson. "I want them to be able to see the relevance of STEM subjects in the real world."

Kerry Anne Kedzierski, a physics and STEM teacher from North East High School, was also interested in giving her students a picture of how chemistry fits in the military environment. Kedzierski worked in the Laboratory Sciences Portfolio Metals Analysis section. Karen Costa, USAPHC chemist, and her team demonstrated the technical equipment used to analyze soil, air and water samples.

Kedzierski provided a demonstration for the parents and students about atoms and their components that she planned to use in her classroom.

"This was a great opportunity to look at real-world science," Kedzierski explained.
"I am able to take knowledge of technical equipment back to the students, but I can also tell them about the people who work at the Public Health Command and why they went into STEM fields."

Keenan said that the DOD will continue to need STEM skills in the future. She hopes that working with local teachers the USAPHC can affect a larger student population and encourage them to work in STEM areas.

I want to take the things I learned back to my students ... I want them to be able to see the relevance of STEM subjects in the real world.





(TOP) Angelina Simon, a physical science technician at the USAPHC, explains how to interpret data from Inductively Coupled Plasma spectroscopy equipment as Kerry Anne Kedzierski, a physics and STEM teacher from North East High School, observes.

(BOTTOM) Spc. Melissa Ito, environmental health technician at Kirk U.S. Army Health Clinic, shows Mary Nickerson, North East High School biology and environmental science teacher, how to take water samples using a portable spectrometer to calculate the chlorine residual and the pH balance at a military food service facility.

20 FALL 2012

# Soldier gets national award for giving back to community

**CHANEL S. WEAVER** 

PUBLIC AFFAIRS OFFICE

Sgt. Joshua Boudreaux has been assigned to the U.S. Army Public Health Command for the last three years, and he has made a lasting impact on his unit and the Army.

He was recently chosen to be the USAPHC non-commissioned officer of the 4th quarter, and in 2010, Boudreaux was selected as the command's NCO of the Year for superior performance in Army field tests and tactics, written exams, board interviews and physical fitness tests.

As a medical laboratory NCO, Boudreaux's job can be quite demanding. He frequently extracts water samples sent to the USAPHC and identifies any potential contaminants resulting from herbicides or pesticides. These chemicals can pose health hazards to Army personnel, even at small concentrations. Additionally, Boudreaux serves as a mentor to other USAPHC Soldiers.

Boudreaux is busy on and off the job, and this summer, he was chosen to receive the American Legion's Spirit of Service award for the numerous acts of community service he performed while stationed at the USAPHC.

The Spirit of Service award is given to enlisted Soldiers who have demonstrated exceptional military performance and provided outstanding volunteer service in the local community while off duty.

American Legion national commander Fang A. Wong presented the award to Boudreaux during the American Legion's annual convention in Indiana. Boudreaux was also given a Legion membership as part of the award.



American Legion national commander Fang A. Wong and Lt. Gen. John F. Kelly, USMC, senior military assistant to the Secretary of Defense, present the American Legion's Spirit of Service award to Sgt. Joshua Boudreaux, a medical laboratory non-commissioned officer at the USAPHC. Boudreaux was selected to receive the award for his extensive volunteer efforts. (Photo courtesy of the American Legion)

"Our nation is fortunate to have such dedicated service members as Joshua Boudreaux," Wong said. "For both his service to America and his community, Sgt. Boudreaux is a credit to his uniform and to our country."

Senior leaders at the USAPHC nominated Boudreaux for the American Legion award because of his extensive community involvement.

When many NCOs look forward to the weekend and periods of leave so that they rest and spend time with their families, Boudreaux saw these opportunities as a time to serve.

He assisted in repairing older homes and constructing new homes for underprivileged families through the Harford County,



Sgt. Joshua Boudreaux tests the pH of a water sample.

Md., Habitat for Humanity program, and he also participated in the League of Dreams, a non-profit organization that helps children with such conditions as Down syndrome, cerebral palsy, autism and scoliosis learn basic softball skills.

Boudreaux said he benefits from charitable work at least as much as the recipients do.

"I enjoy giving my personal time to help other people," said Boudreaux. "It is very rewarding for me to put others ahead of myself."

During his off-duty time, Boudreaux also donated more than 100 hours participating in marathons that raised funds for the Autism Society, American Liver Foundation, Pediatric Cancer Research Foundation, Alzheimer's Foundation of America, and Child's Play, a charity that seeks to improve the lives of children in hospitals through the video game industry.

Boudreaux's supervisors at the USAPHC said he is very deserving of the American Legion's prestigious award. They said Boudreaux illustrates the Army value of selfless service in many endeavors.

"I have watched Sgt. Boudreaux over several years and seen him give every task his best effort," said Staff Sgt. Hiram Hendri, who works in the USAPHC Laboratory Sciences Portfolio. "He has given the community a large amount of personal time in order to help others. He is a truly generous and unselfish person."

Boudreaux recently started designing medieval body armor, and that endeavor turned into a community service project.

"A local English teacher's class was reading' 'Beowulf,' and the teacher asked that I show the armor to her class to educate them in medieval warfare," said Boudreaux.

Although many of his colleagues praise Boudreaux for the actions he performs to give back to his community, Boudreaux doesn't want much recognition.

"Receiving this award was totally unexpected," said Boudreaux. "I'm not a hero; I believe that helping others is my duty."

In the rare moments when he is not busy performing his professional duties or volunteering in his local community, Boudreaux also enjoys reading, writing poetry and essays, and playing video games.

He recently married, so he plans to spend more time with his wife and a little less time volunteering.

"I'm working to find a balance between my career, volunteerism and family," said Boudreaux. "I believe there's time to give attention to each of these areas of my life if I don't overextend myself in one area."

(The American Legion Public Relations Office contributed to this story.)

# Callison named occupational therapy consultant

JANE GERVASONI EDITOR



Col. Myrna Callison was recognized as the occupational therapy consultant to the Army surgeon general in an Aug. 17 ceremony at the U.S. Army Public Health Command–Headquarters, Aberdeen Proving Ground, Md.

Lt. Gen. Patricia D. Horoho, Army surgeon general, selected Callison to serve as the occupational therapy consultant because of her demonstrated excellence in the field, according to Col. Theresa M. Schneider, the Army Medical Specialist Corps chief. Callison also was sworn in as the 19th assistant chief, occupational therapist section of the Medical Specialist Corps, at the ceremony.

John Resta, USAPHC deputy commander for public health, explained that Callison would assist military

personnel in the area of occupational therapy to maintain a state of excellence.

"She is an expert in her field," he said, "and this event recognizes her excellence."

Callison's supervisor, Donna Doganiero, director of USAPHC's Occupational Health Sciences Portfolio, said that Callison "has energy and compassion that is both infectious and contagious—in the best way."

"This is an exciting time for occupational therapy," Callison said. "I will be leading the team that will make things happen."

Callison will serve as the surgeon general's clinical expert in occupational therapy in addition to her USAPHC positions as Ergonomics Program manager and OHS Portfolio executive officer.



The Preventive Medicine Master Divas team, Lt. Cols. Kerri LeFrancis, Jennifer Caci and Elizabeth Miller, Maj. Gen. Jimmie O. Keenan, and Lt. Cols. Sheryl Kennedy and Deydre Teyhen, pose with their first-place Eagle trophy after competing in the Association of the U.S. Army 10-Miler in Washington Oct. 21. The team running time was 5 hours 2 minutes and 15 seconds. (Photo by Will Keenan)