

Deployment Quarterly

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U.S. DEPARTMENT OF DEFENSE
Deployment Health
Support Directorate



DIRECTOR'S **message**

Dear Readers:

Force Health Protection is a broad concept that takes in everything we do to protect our fighting forces. The concept recognizes that the most valuable and complex weapon systems in the U.S. military are our servicemembers. As the deputy assistant secretary of defense for force health protection and readiness, I am responsible for the health policies and programs that protect our personnel. But ultimately, the job of maintaining health begins with servicemembers themselves. Force Health Protection doctrine is based on three inter-related pillars — healthy and fit force, casualty prevention, and casualty care and management. We can supply the equipment and caregivers to deal with and try to prevent battlefield casualties, but maintaining a healthy and fit force requires the efforts of every soldier, sailor, airman, Marine and Coast Guardsman.



We want every person in uniform to take advantage of the systems put in place to help them stay healthy. Military caregivers practice preventive medicine and promote healthy lifestyles among their patients. Perhaps most importantly, they are charged with listening to their patients. We count on military members to let them know about their health concerns. With honest feedback, caregivers are better able to provide the care needed.

Leaders at all levels contribute to the health of the force through a number of health promotion systems and initiatives. A first step is physical fitness training. Our goal is to have 95 percent of military members demonstrate excellence in physical fitness, including cardiovascular fitness, muscular strength and endurance, flexibility and agility. We also have nutrition education programs and dental health programs in place. We maintain a vigorous immunization program for servicemembers. More recently, we've improved medical surveillance by instituting pre- and post-deployment health assessments, and have refined the preparation we offer servicemembers for the stresses of the combat environment.

We encourage servicemembers to take an active role in sustaining the fitness of the force by avoiding unhealthy behavior. Proactive steps servicemembers can take to maintain a healthy lifestyle include exercising and eating well, getting adequate rest, using seatbelts, and avoiding alcohol abuse. It is also important to get regular medical and dental checkups, and to seek help when signs of emotional problems arise. Working together, servicemembers and military health care providers can make sure we maintain a fit and healthy force.

Force Health Protection is a relatively new concept that calls for a cultural change within the Department of Defense. This change is necessitated by the significant transformation of how we now deploy our forces. Today, remote, sustained deployments have increased — and are more often accomplished by members serving in the National Guard and Reserves. Our servicemembers are more active, mobile and scattered than they were in the past. Individual fitness, preparedness and preventive measures are more important than ever. We will do all that we can to ensure that policies and programs are in place to support a healthy and fit force. We ask that all servicemember use them — only then, can we make them better.

Sincerely,

Ellen P. Embrey
Deputy Assistant Secretary of Defense
for Force Health Protection and Readiness

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The Deployment Health Support Directorate

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OPERATION ENDURING FREEDOM — Staff Sgt. Rick Casto guides a B-52 Stratofortress from Minot Air Force Base, N.D., into the wash rack at a forward-deployed location supporting Operation Enduring Freedom.

Photo by Senior Airman Amanda Cervetti

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On the Cover

Pvt. 1st Class Jessie Elder takes a knee and scans his sector a patrol mission along the Former Yugoslav Republic of Macedonia border on Dec. 11, 2002. Soldiers of 1st Platoon, C Company, 2nd Battalion, 2nd Infantry Brigade conducted this mission to help deter any smuggling and illegal activity on and around the Former Yugoslav Republic of Macedonia border. The soldiers of 1st Platoon, C Company, 2nd Battalion, 2nd Infantry Brigade are in Kosovo supporting Operation Joint Guardian II.



U.S. Army photo by Sgt. April Johnson

Smallpox Vaccine: Part Of A National Strategy

By **William Winkenwerder Jr., M.D., M.B.A.**



Last month, President Bush announced the national smallpox vaccination program. The decision to immunize those who will serve as members of emergency response teams, clinical staff and our deployed forces at greater risk of exposure is part of that national strategy. The decision was based on a careful risk and benefit analysis.

Smallpox is a deadly and contagious disease, and the vaccine is the only way to prevent it.

The health and safety of our troops are our top concerns. Servicemembers are among the first to receive the vaccinations because of their occupational responsibilities on smallpox response teams, in hospitals and clinics, and because they could be on the frontlines of a biological attack. This protection ensures that military missions can continue even if a smallpox outbreak occurs. Since our servicemembers are deployed worldwide, it may not be feasible to vaccinate soon after exposure if they are deployed to remote locations or engaged in military operations. And we know that some military personnel will be unable to postpone vital missions if smallpox is used as a weapon. We must ensure our forces are protected.

We know the vaccine requires careful use. Many millions of people have been vaccinated successfully against smallpox since the introduction of the vaccine in the late 1700s. The smallpox vaccine was routinely administered worldwide until the World Health Organization declared the disease eradicated in 1980. DoD continued to vaccinate our servicemembers until 1990. We have experience in managing the risks that come with smallpox vaccination. Comprehensive pre-vaccination screening and active post-vaccination surveillance are the two critical components of a successful vaccination program.

Pre-vaccination. We are actively evaluating and exempting people with certain risk factors for vaccination. Potential vaccinees must complete a medical form asking about any conditions that may exclude them from receiving the vaccine. These conditions include eczema or a history of eczema, atopic dermatitis, a suppressed immune system or taking medication or radiation therapy that suppresses the immune system, pregnancy, an allergy to the vaccine or any of its components, or having a household member who has any of these conditions. Physicians and health care providers will decide who should be exempted. These exempted personnel will still be deployable and their vaccination status will be reevaluated if an actual smallpox attack occurs.

Post-vaccination. Apart from the pre-screening process there will be a follow-up examination to verify that the

vaccine "took." DoD has developed a vigorous monitoring program so that in the rare instance of an adverse reaction, the vaccine recipient will be cared for quickly and thoroughly. There may be additional concern in the National Guard and Reserve community about coverage for smallpox-related treatments. Any smallpox vaccine reaction is considered a line of duty condition. National Guard and Reserve personnel and their families can seek care at a military treatment facility for any smallpox vaccine-related events. If a military treatment facility is not available, Reserve Component members or their families can be reimbursed for civilian care obtained due to a medical problem resulting from the smallpox vaccination.

The Department of Defense is conducting a comprehensive education program for servicemembers and their families. Along with information available from your chain of command and health care professionals, each vaccine recipient will receive information to take home. This information explains what a normal reaction looks like and how to care for the vaccination site. There is also an optional 30-day diary card for individuals to track their health status and include in their medical records. Servicemembers are encouraged to ask any questions if they have concerns.

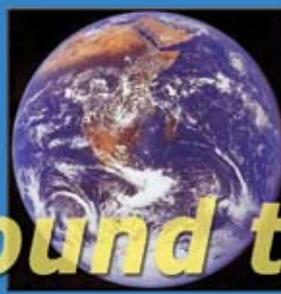
Even if you have been vaccinated against smallpox in the past, revaccination is necessary to ensure solid protection.

If you are one of the people designated to receive the vaccine and still have a question, there are several places you can go for more information. The U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention, and the Food and Drug Administration have information available on the Internet. DoD has created a Web site specifically for the military smallpox vaccination program. It can be found at <http://www.vaccines.army.mil/smallpox.asp>.

Smallpox vaccination is a prudent course for preparedness and may serve to deter our enemies. We have the medical expertise and training to ensure that our servicemembers are safely protected from this biological warfare threat. ■

William Winkenwerder Jr., M.D., M.B.A., is the assistant secretary of defense for health affairs. He serves as the principal staff assistant and advisor to the secretary of defense for all the Department of Defense health policies, programs and activities, and subject to the direction of the secretary of defense, exercises oversight of all Department of Defense health resources.

News from Around the World



Harry S. Truman Deploys in Support of Operation Enduring Freedom



regularly scheduled six-month deployment, the ship's second since its commissioning in 1998.

The ship and embarked Carrier Air Wing Three are deploying in support of Operation Enduring Freedom.

According to executive officer Capt. Ted Carter, there is no need for anything extra to inspire the crew.

"Everybody here is self-motivated," Carter said. "No job is less important than any other. I've never felt the need to give the crew any 'artificial motivation.'"

Preparing for a six-month stint away from their homes and families, Harry S. Truman sailors made sure to have their last-minute necessities and comforts packed and ready to go.

"I brought all my favorite CDs and pictures of my family on board," said Interior Communications Electrician 2nd Class (SW/AW) Noah A. Cook of Harry S. Truman's

combat systems division. "These little things help me escape the daily routine when we are out to sea."

Apart from the books, photo albums, blankets, CDs and other material possessions that will bring a

"little slice of home" underway, sailors have different ways of coping with being away from their loved ones for six months.

"Even though this is my second deployment, it's going to be difficult to be away from my loved ones again," said Aviation Electronics Technician 2nd Class (AW) Andrew J. Hill, a member of the ship's aircraft intermediate maintenance division. "So I plan on constantly keeping in touch with my girlfriend and family throughout the next couple of months."

The emotional stress felt by both the sailor and their families can be lessened through regular contact via mail, e-mail and telephone calls. Sailors who left children behind will be able to remain close thanks to the "United Through Reading" program.

The program will give deployed sailors and Marines the unique chance to read stories aloud on video. The video is then sent home so their children can listen to their favorite stories as told by their parent.

"I think this is a fantastic opportunity to help deployed families keep in touch," said Chief Disbursing Clerk (SW) Nancy McNeil, who oversees the program. "It's a comforting feeling knowing that my family will miss me when they see the video. It helps me focus on what's out here by giving me peace of mind."

Harry S. Truman is scheduled to relieve USS George Washington (CVN 73), whose return date has not been determined. ■

ABOARD THE HARRY S. TRUMAN
— The aircraft carrier USS Harry S. Truman (CVN 75) left its homeport of Norfolk, Va., Dec. 5, 2002, for a

Military Looks at 'Rebalancing' Reserve Component, Active Force

WASHINGTON — Certain military job specialties, including military police and civil affairs, are being overburdened in the Reserve Components and may need stronger representation in the active duty force, the Defense Department's senior adviser on Reserve affairs said today.

Thomas F. Hall, assistant secretary of defense for reserve affairs, told a group of reporters on Nov. 19, 2002, that repeated call-ups of certain specialties might eventually hurt recruiting and retention in the Reserve forces.

Hall related his experiences last week in a St. Louis, Mo., meeting with state representatives for the Employer Support of the Guard and Reserve program. He said employers generally support Reserve duty by their workers, but at times it can become a burden, particularly for small businesses and private practices.

"When their reservist is mobilized for the first time, it's probably OK," Hall said the state employer representatives told him. "When they're mobilized for the second time, it might be OK. But when they're mobilized the third time in three years running, this causes a particular problem for the Reservist, their family and the employers."

Still, he cautioned,

servicemembers shouldn't look for a mass exodus of specialties being moved from the Reserve Components to the active force. He called it more of a "rebalancing."

Hall was sworn in Oct. 9, 2002, but he was already familiar with issues facing Reserve forces. He previously commanded the Naval Reserve for four years after a 34-year active duty career as a naval aviator.

He said the greatest challenge facing him in his job isn't necessarily about the numbers. Ensuring Reserve forces are effective when called is much more important than how many there are, he remarked.

"The guiding principle for all of us should be that we have the right Reservist with the right equipment [and] the right training at the right place at the right time to help make a difference in any conflict," he said.

Hall spoke of the heavy burden placed on the Reserve Components by the war on terrorism. Thousands were called to duty on or immediately after Sept. 11, 2001, when terrorists struck in New York and at the Pentagon.

Today, roughly 51,000 Guard and Reserve members are on active duty across the United States and around the world. At the peak of the call-up, nearly 100,000 Reserve Component members were activated. In all, roughly 130,000 Reserve troops have served in support of operations Enduring Freedom and Noble Eagle. ■

Medical Convoy Offers Health Care to Afghans

BAGRAM, AFGHANISTAN — An Army convoy with supplies and Army personnel set out to make a positive difference in the lives of residents of an Afghan community Oct. 14, 2002, by conducting a medical capability mission.

Setup in the town of Koshi-Sofi, south of Bagram, including organizing paperwork, pills and ointments and lining up patients, took only moments.

Through a Pashtu interpreter, patients first filled out a form listing their ailments, ranging from toothaches to dysentery. Children, many of whom suffered from internal parasites, were treated with a de-wormer.

"We're enabling the local people to live a healthier life," said Army Capt. Regina Long, 339th Combat Support Hospital, a nurse practitioner from Cincinnati, Ohio. Long gave overall health examinations, treating everything from ear infections to dysentery.

The team instructed the patients on how to live healthier lives and handed out toothbrushes and toothpaste.

"We briefed them on mine awareness and basic sanitation and how to prevent illness," said Sgt. 1st Class Samuel Osborne, 227th Preventive Medicine, the non-commissioned officer-in-charge, from Fort Lewis, Wash.

Oral surgeon Col. (Dr.) Donald Hart, 339th Combat Support Hospital, also explained the importance of oral hygiene to the patients.

He extracted teeth to prevent future complications with deep cavities. He also used the interpreter to reassure patients who refused the extraction out of fear.

"For many of the patients coming in today, this is the first time they are seeing a dentist or medical care," Hart said.

Soldiers were also on hand to help the local livestock. ■

notable QUOTE

"Until recently, we've been planning ostensibly for chemical events and most of the services tended to lump 'biological' in the same word as 'chemical'. And only now are we beginning to have our civilian and military leaders understand that those are actually different."

— Lt. Gen. (Dr.) George Peach Taylor Jr.
U.S. Air Force Surgeon General

Q *I've heard recent news reports about Marines having strep A. Is this something I should be worried about? I thought that strep was similar to getting a really bad sore throat.*

A Most sore throats are caused by viruses, but strep A bacteria (Group A streptococcus) are also a common cause of sore throat. Your doctor may call it acute streptococcal pharyngitis. People with strep throat infections have a red and painful sore throat with white patches on their tonsils. A person may also have swollen lymph nodes in the neck, run a fever and have a headache. Strep A also cause a common skin infection called impetigo in children. Experts estimate that more than 10 million throat and skin infections like these occur every year in the United States.

Group A streptococci are also responsible for a variety of less common, but potentially serious health problems. These include life-threatening conditions such as toxic

shock syndrome, necrotizing fasciitis, blood stream infections, and pneumonia.

Group A strep bacteria can spread from person to person by direct contact with saliva or nasal discharge. Most people do not get group A strep infections from casual contact with others, but a crowded environment like a dormitory, school, or an institutional setting can make it easier for the bacteria to spread. There have been numerous instances of Group A strep epidemics in military recruit populations. Many of these outbreaks have been unusual because of a high frequency of cases of streptococcal pneumonia. Recruit populations in the U.S. military are routinely monitored for cases of Group A strep disease. When rates of infection rise, military medical



authorities administer preventive antibiotics to all recruits to eliminate the bacteria from the population. After 24 hours of antibiotic treatment, a person will no longer spread the bacteria to others. There have also been reports of contaminated food, especially milk and milk products, as a source of infection.

People with strep throat usually recover from the symptoms of infection on their own. The principal reason for treating strep throat with antibiotics is to prevent later occurrence of acute rheumatic fever or acute glomerulonephritis. These serious complications, which most affect the heart and the kidney, respectively, appear to result from the immune system being turned against our own bodies.

If you develop a severe sore throat, your doctor or other health care worker can take a sample from your throat. This will be used for a culture or a

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vaccines DRUGS & HERBS

Q *I am on active duty, over 40, and pretty sure I have received the smallpox vaccine twice in my life. I am considered one of the first responders at my installation. I am told we will be soon receiving smallpox immunizations. Is this really necessary since I have already been immunized? Will additional immunizations with the smallpox vaccine increase my chances of having one of the more severe reactions that the media continues to harp on? I am not afraid to receive the shot again, but I do have a ton of questions. The little information that I have heard about this has all been negative.*

A Many people have expressed similar concerns. First, because of the significance of associated with the vaccine, and the

importance the Department of Defense places on protecting the health of our forces, there is a wealth of information available to you. Because you are a servicemember, I recommend you use the DoD Web sites that provide medical information and policy guidance that directly affects you. There are two good choices to choose from. First is the DoD's Military Vaccines Office at <http://www.vaccines.army.mil>. It has



a lot of information for the general public and for health care providers.

Second is the Office of the Assistant Secretary of Defense for Health Affairs Web site at <http://www.ha.osd.mil>. This Web site contains administrative and clinical policies that provide guidance on the Defense Department's smallpox immunization program.

I highly recommend you familiarize yourself with the specifics of these policies. They contain guidance on medical screening necessary before immunizations, pregnancy screening, vaccination and revaccination, timing and spacing of vaccinations, medical exemptions, and

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Army Develops New System to Track Deployed

by austin camacho

When American forces deploy overseas, they are increasingly accompanied by civilians. Defense civilians and contractors are needed to provide technical support, often in highly specialized fields. They handle communications, logistics, and morale, welfare and recreation functions. They also perform maintenance, analysis, and information and technology functions. As vital as these civilians are, it has been difficult to track their locations in a combat zone. The Army has recently introduced a solution to that problem with their Civilian Tracking System, or CIVTRACKS.

Maintaining accountability of deployed civilians has been a major issue for the services for more than a decade, according to James Feagins, chief of the Army's civilian mobilization branch.

"Desert Storm was the first time we had a significant number of civilians on the battlefield," he says. "Before that, it wasn't as big an issue."

About 2,500 civilians are deployed overseas with the military, performing support duties that enable servicemembers to do their jobs. Those civilians may work for the Department of Defense, any of the military services or defense contractors. A few hundred

of those civilians are Army employees, and the Army has been working to maintain better location data on those workers.

At first, Army officials tried to get their civilians incorporated into military personnel accountability systems, but it simply wasn't practical. In time, the Army developed a secure, web-based system that allows deployed civilians who have access to the Internet to provide the tracking data for their permanent records. That system went online in May 2002. Each civilian employee is responsible for reporting his or her own location, and past confusion about who was where during wartime is an incentive for them to keep the record of their location up to date.

"If there's a similar situation to Desert Storm, where there may be harmful exposures, CIVTRACKS would provide data to help us identify who might have been exposed to what," Feagins says.

This is just one example of CIVTRACKS's usefulness. Many kinds of wartime incidents, including enemy attack, could make personnel accountability vitally important. And beyond the need to protect civilian workers, the Department of Defense has a responsibility to be able to account for its civilians on foreign shores. Congress periodically calls for reports of how many civilians have been deployed, where they were sent, and what necessary skills they possess.

Currently it is mandatory for Army civilians to keep their location data current on the system, and optional for Army contractors. Each employee is responsible for entering his or her own data. Each is issued a deployment card that contains instructions, their user identification code and a password to access the system. Army web designers have made the process as simple as possible.

"We take the minimum amount of data possible from the civilians," Feagins says. "We figured the less complicated we make, the more likely people are to use it."

Once a deployed civilian logs in, he need only enter his name and social security number, the time and dates of deployment, and changes to his location. If it is impossible or impractical for the civilian to get online, their supervisor can make the entries. The data is stored at the headquarters of the Army's Civilian Personnel System. Army officials can then use that database to gather whatever statistical information they need to generate reports for the major commands. Naturally, the information is kept confidential, to be released only by the commander.

Although it is currently an Army tool, CIVTRACKS is structured in such a way that it could accommodate all of DoD. Civilians working for any of the services can use it now on a voluntary basis, and Army can generate limited reports to their components on request. Feagins says his team is already in the process of upgrading the system, and that it is

possible that some time in the future, the location of all civilians deployed with the American military will be monitored by CIVTRACKS. ■

Veterans History Project Keeps War Memories Alive

by Sgt. 1st Class Doug Sample, USA
American Forces Press Service

There are more than 19 million veterans living in the U.S. today. With each is a personal story of battles fought, victories and defeats. Each story, though sometimes heartbreaking, is full of love, dedication and patriotism.

That's how Peter Bartis describes his work with the Veterans History Project. The grassroots effort that began two years ago — and has now caught fire — is hoping to keep those memories alive.

Bartis, a senior program officer for the project, said that each day some 1,500 U.S. veterans die — and with them a treasured part of the nation's past.

"These are some of the most amazing stories; when you put them all together you get a story of the nation," he said.

Over the past year alone, the project's staff of 16 has already collected more than 14,000 items, such as letters and other memoirs, and video and audiotape interviews.

"We're all just blown away by these stories," he said. "The information has been very rich, it's been emotional, and it's very heartening to listen to the stories, to learn how and why they [veterans] joined, their war-time experience."

With the idea that future generations could learn from the histories of the nation's veterans, the American Folklife Center at the Library of Congress began the effort to collect video and audio recordings of personal histories and testimonials

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Reserves Complete A Historic Deployment

by staff sgt. sam kille
marine forces unitas public affairs

here were those who doubted whether or not it could be done. After all, Reserves are merely weekend warriors. Right?

Wrong. With stops in 11 Latin American countries and six intense, bilateral exercises under their belts, the nearly 300 Reserve Marines who took part in the amphibious phase of Unitas 43-02 shattered myths and proved their value as an integral part of the Marine Corps' total force principle before returning to Camp Lejeune, N.C., in early December.

"Unitas was a highly successful deployment in which our Marines and sailors performed magnificently," said Reserve Lt. Col. Anthony Hattey, the commanding officer of Marine Forces Unitas. "These Marines are coming back from this deployment with some special skills that drilling Reserves don't normally acquire."

Unitas — Latin for unity — is an annual, multinational series of training exercises with the maritime forces of several Latin American countries. Since 1981, U.S. Marines have participated in Unitas, helping to improve international relations in the Southern Hemisphere while promoting democracy and hemispheric defense. This year marked the first use of Reserves, who are providing operational tempo relief to II Marine Expeditionary



Marines from Golf Company, Battalion Landing Team, 2nd Battalion, 2nd Marines, 24th Marine Expeditionary Unit (Special Operations Capable) begin a patrol after coming ashore and securing a landing site for "Exercise Edged Mallet 2003" in Manda Bay, Kenya.

Force, based at Camp Lejeune.

According to Hattey, who left behind his position as a police officer in San Jose, Calif., to command the unit, the use of Reserves in this capacity has bolstered the Corps' capabilities for future missions.

"We have developed a unique manner by which the Marine Reserve can contribute to the ongoing missions of the active duty component, and we have done it well," Hattey said. "Our Marines will return to their units with years' worth of experience — as well as sea stories — that will assist in retention and 'volunteerism' for future operational relief exercises."

The active duty Marines of II MEF

agree.

"They stepped up to the plate and hit a home run for us," said U.S. Marine Corps Col. David Mauldin, chief of staff of II MEF. "With little time to prepare, they stood up and took a real world mission off our hands — providing valuable operational relief for our active duty Marines."

The four-month long deployment began July 23, 2002, when Marine Forces Unitas loaded buses bound for Morehead City, N.C., to embark aboard the USS Portland (LSD-37), a dock landing ship based at Naval Amphibious Base Little Creek, Va.

Once onboard, the Marines conducted pre-deployment training in Onslow Bay, N.C., prior to steaming to Little Creek to load supplies for the cruise. They departed Little Creek on Aug. 5, 2002, willing, ready and able to forge new ground.

"Every new country brought us a new opportunity," said Reserve Sgt. Russ Gordon, a reconnaissance team leader, who left behind a job as the manager of a fishery in Yakutat, Alaska, for the exercise. "Being Reserves, we usually train at the same places, doing the same old things. Down there, every beach meant a

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Historic

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different reef, a different obstacle. Plus, there is only so much training you can do during a weekend drill. There, we were able to work every asset and learned something new every day — whether we realized it or not.”

Through the course of their travels, Marine Forces Unitas trained in every environment imaginable — from white, sandy beaches in the Caribbean to steamy jungles in the Amazonian Basin from barren deserts along the Pacific Coast to the snow-capped mountains of the Andes. Their experiences were highly educational.

“The deployment provided us excellent training and a wealth of knowledge,” said Reserve Lance Cpl. Scott Kasules, a machine gunner and a special education teacher assistant from Elgin, Ill. “The more we did, the better we got. The training was the closest one could get to combat without actually being in combat — in today’s world — that is more important than ever.”

A highlight for many of the Marines was the exchange of ideas and tactics with the host country military forces, which included the marines of Colombia, Ecuador, Peru, Chile, Argentina and Brazil.

“Exercises like this [with foreign countries] not only give us a better understanding of how others operate in combat, but helps to destroy stereotypes that both nations have,” said Reserve Lance Cpl. Jason Juarez, an infantryman and a sophomore

at the University of Texas in San Antonio. “Through this, we can relate to each other much better.”

Many of the host countries marines agreed. One such marine was Cadet Jorge Raos, from Medellin, Colombia. During the Colombian Bilateral, Raos and fellow future marine officers from the Colombian Naval Academy, received training on the employment of the M-240G machinegun. Raos was genuinely enthused about the training he received.

“This was very good training for the Colombian Marines — we really needed to learn these techniques,” Raos said. “I hope we get to participate in Unitas every year with the U.S. Marines. They are the best in the world.”

Training aside, the deployment also exposed the Marines and sailors to a world few Americans get to see. In the Dominican Republic, they stood on the site where Christopher Columbus first set foot in the New World. In Colombia, many helped renovate a school in an impoverished village. In Ecuador, they bought Incan-influenced souvenirs. In Peru, they broke bread with locals, and were entertained by traditional dancers. In Chile, a number took advantage of various tours. The U.S. Marines even had the opportunity to mix culture and tradition when they celebrated the U.S. Marine Corps’ 227th birthday in Rio de Janeiro, Brazil.

“This deployment has been a real

eye-opener,” said Reserve Lance Cpl. Rory Thornton, a machine gunner from Nahant, Mass. “I was able to see some of the most beautiful places in the world. I thought it might be a little strange being an American there, but the people are very genuine — absolutely friendly.”

The Marines and sailors also gained a greater appreciation for life in the United States.

“When you see how little these people have, you realize how lucky we are to live in a wealthy nation,” said Reserve Maj. Rod Long, commanding officer of the unit’s ground combat element and a corporate recruiter in Houston, Texas. “Even an MRE [Meals-Ready-to-Eat] looks different after seeing how little they have — it’s a lot harder to complain about the little things now.”

With the deployment now behind them, the Reserve Marines will return home to the daily grind of their civilian lives, just in time for the holidays. Although they will resume the lives they put on hold to deploy with Marine Forces Unitas, they will be even more prepared to answer the call, the next time they are needed. Weekend warriors they are not. ■



Marines from Golf Company, Battalion Landing Team, 2nd Battalion, 2nd Marines, 24th Marine Expeditionary Unit (Special Operations Capable) leave USS Austin (LPD-4) in combat rubber reconnaissance crafts before securing the beach landing site for “Exercise Edged Mallet 2003” in Manda Bay, Kenya.



DoD Releases Final Gulf War Air Quality Report

The Department of Defense released its final environmental exposure report that addresses the effects of exposure to poor air quality during the Gulf War and the effect it may have had on the health of Gulf War veterans on October 31, 2001. Investigators from the Deployment Health Support Directorate — supporting the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments — still assessed the risk of adverse long-term health problems from exposure to be minimal.

An interim environmental exposure report on particulate matter was released July 27, 2000, to the general public. Since that time, investigators have uncovered no new information that would change their original conclusions. The final report can be read on GulfLINK at http://www.gulfink.osd.mil/particulate_final/.

The region's air quality was a primary concern due to the high levels of dust and sand particles present in this region of the world. In addition to blowing sand from the desert environment, soot and the by-products of combusted crude oil contributed to the poor air quality. These particles are collectively referred to as particulate matter.

Particulate matter is a generic term applied to a broad class of chemically, physically and biologically diverse substances spanning a range of particle sizes. The chemical composition of the samples indicate that roughly 75 percent of the airborne particulate matter consisted of clays, primarily calcium and silica originating from the sand indigenous to the region. Another 10 to 23 percent was soot that originated from a variety of sources, including oil well fires and other industrial sources, and less than 10 percent came from

miscellaneous sources.

The environmental exposure report is intended to present what is currently known regarding U.S. servicemember exposures to particulate matter while serving in the Gulf War, and to summarize the results of the medical literature review and a qualitative health risk assessment. This report examines respirable and soot concentrations — the principal components of concern in particulate matter — from monitoring data and provides an estimate of troop exposure. The overall objective of the report is to determine the likelihood of the onset of chronic or long-term effects rising from particulate matter exposure.

Particulate matter levels were often twice the recommended levels for safeguarding health. While pre-war monitoring data indicated that these levels are among the highest in the world, they are considered “normal”

for the Kuwaiti region and result primarily from natural and man-made sources.

From May to December 1991, numerous efforts were undertaken to assess the air quality in Kuwait and Saudi Arabia. Air quality sampling and monitoring data were collected by several agencies and various countries. Collectively, the data indicated that, with the exception of particulate matter, pollutant levels were surprisingly low.

“Data of this nature is critical in developing a causal relationship and in determining whether there was a potential for long-term health effects in Gulf War veterans,” said William Shaughnessy, the lead investigator on the report.

The report also found that there was a significant mass of particles in the respirable size range, that is, those less than 10 microns in diameter.

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DoD Evaluates Labs Analyzing Vets' Urine

A laboratory assessment information paper that cites the results of a study to evaluate the performance of laboratories that were analyzing veterans' urine for uranium was released by the Department of Defense on October 31, 2002. Specifically, the study evaluated laboratory capabilities for analyzing uranium in urine at concentrations observed in Gulf War veterans by assessing the accuracy and reproducibility of measurements of total uranium and isotopic uranium. It also evaluated the performance of six laboratories that tested urine from veterans or Department of Defense personnel, using American National Standards Institute/Health Physics Society standard criteria and statistical methods.

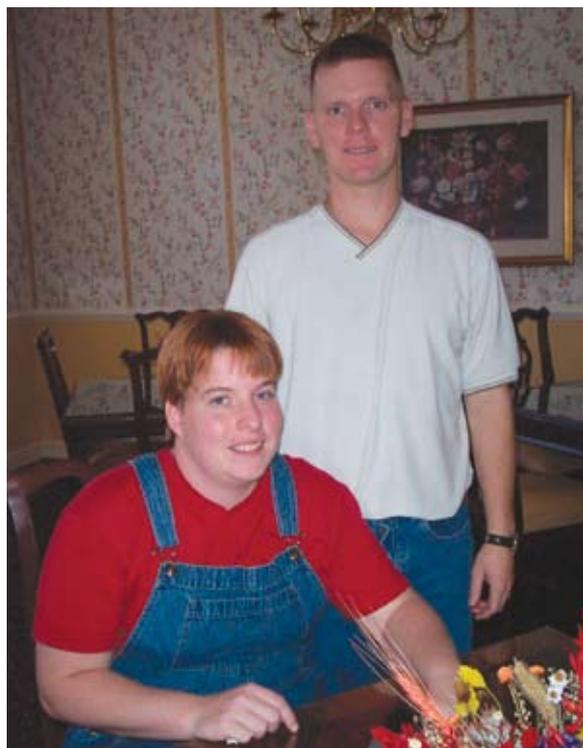
Members of the Deployment Health Support Directorate evaluated the study's implications for using urine analyses for estimating the potential health effects of depleted uranium exposures and for differentiating depleted uranium from natural uranium in the urine. The assessment concluded that participating laboratories could accurately quantify total uranium at concentrations considered harmful to health or above exposure guidelines (1.0 microgram of uranium per liter or more).

The paper in its entirety can be read on GulfLINK at http://www.deploymentlink.osd.mil/du_library/lab_assessment/index.htm. ■



Fisher House at the Forest Glen Army Annex in Silver Spring, Md., serves as a temporary home to family members and outpatients undergoing treatment at Walter Reed Army Hospital.

Families, Patients Waiting for Medical Treatment Find Comfort at Fisher Houses



Tammy Kirk and Sgt. David Kirk flew in from Vilseck, Germany; they are both staying at the Forest Glen Fisher House while Tammy undergoes medical treatment at Walter Reed.

story and photos by joan kennedy

Being hospitalized in a military hospital far from home used to mean a separation of hundreds or thousands of miles from family — unless the family could afford the financial burden of a prolonged hotel stay in an unfamiliar city. The cost of getting to the hospital's location, renting accommodations, and living for weeks on restaurant and cafeteria food could wipe out a family's savings and even drive it into debt. Camping out on hospital furniture and living on vending machine fare was once the only alternative for families who were far from home and could not afford hotel rooms. But since 1990 the Fisher Houses have been changing that.

"Not every military or VA hospital offers the full range of medical specialties. Sometimes, a more distant hospital will have specialized expertise or a particular piece of equipment needed for the patient's treatment," says Jim Weiskopf, public affairs director of the Fisher House Foundation.

Soon after learning she needed surgery and other treatment to remove inner ear tumors and rebuild her cochlea, Tammy Kirk learned she would be traveling for the treatment to Walter Reed Army Medical Center in Washington, D.C. Since Tammy lives in Vilseck, Germany — where her husband, Sgt. David Kirk, is currently stationed — she was anxious at the prospect of traveling alone for a prolonged stay in an unfamiliar city. Tammy soon learned that she and David would be able to stay together, in a homelike environment close to the hospital, for as long as she needed to be close to Walter Reed.

"When they told me Fisher House would cost us only \$10 a day," says Tammy, "we were really glad to have a place but I didn't think it was going to be very nice."

“This really does feel like a home away from home, and it takes the stress off being at a hospital.”

She smiles and gestures, her arms taking in a warm, sunny dining room decorated in colonial style with centerpieces on each small table.

“Then we got here, and it looked like ... this.”

Tammy and her husband have been at Forest Glen Fisher House — located near the Walter Reed Army Medical Center — for a month, awaiting and receiving medical treatment.

“This really does feel like a home away from home, and it takes the stress off being at a hospital.” Referring to the other residents of the Fisher House, she continues, “We’ve got a family here, and when we support each other it makes us all stronger. Taking the financial burden away lets us focus on just getting better.”

Hospitality houses, built at no charge to the government by the Fisher House Foundation, have been cropping up on the campuses of major military centers and Veterans Affairs hospitals for the past 12 years. Increasingly, military patients’ families now have the option of staying in a comfortable, attractive and supportive setting. The Fisher House Foundation pays for the construction of the fully furnished houses. They are built on government property and donated to the military services or VA, which then assumes responsibility for their operation and maintenance.

Vivian Wilson, who has served as the manager of the Forest Glen Fisher House since its 1991 opening, recalls the first six

months after it opened its doors. In a word, it was “chaotic,” she says.

“Probably the hardest part of coordinating with the hospital was getting straight exactly what kind of patients we were set up to accommodate,” says Wilson.

Fisher Houses, she stresses, are set up for families of patients and for ambulatory outpatients who do not need nursing care in the house itself beyond what their families can provide. One significant patient population served during that first year, she recalls, consisted of returning Gulf War veterans being worked up for medically unexplained symptoms.

“I remember them sitting here describing how they didn’t know why they were dizzy and tired, some of them describing altered senses of smell and taste, and all saying how hard it was to get anyone to take their concerns seriously,” says Wilson.

Another couple staying at the Walter Reed Forest Glen Fisher House are Ed and Dyna Meyer, here from Alaska for evaluation and treatment for a tumor on Ed’s spine. Alaska can seem like an unlikely choice for a retiree’s home until you hear Ed talking about their life near the Kenai River. There, King Salmon give way to Reds in mid-July, which in turn yield to the Silvers at the end of July. Ed and Dyna’s home has its own salmon smoker and filleting table in the backyard. It makes you want to pack up and



book a room by the Kenai River, at least for couple of weeks in July.

Thirty-one Fisher Houses now operate at 17 military installations and at five Department of Veterans Affairs medical centers across the United States and in Germany. Each year, they offer more than 184,000 days of lodging to more than 7,000 families in a nurturing environment designed to allow military and veterans’ families to face a medical crisis together. The typical Fisher House has eight suites, two of which are designed for handicapped access. The houses, each furnished in the tone and style of the local area architecture, can accommodate up to 16 family members. The basic design features a shared kitchen, laundry facilities, spacious dining room and an inviting living room, complete with fireplace, library and children’s toys. Most of these houses are built on military installations with easy access to everything guests might need: church, commissary, exchange and recreational facilities. Usually the hospital is just a few hundred yards away. If a Fisher House is located beyond walking distance, shuttle transportation is available.

To stay at the Fisher House, family members must be a patient, or the spouse, child or parent of a patient, and space is prioritized on the basis of financial need and other factors. No reservations can

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Each Fisher House is professionally decorated. Many of the Fisher House living rooms are complete with books, a video library and toys.

Fisher House

— Continued from Page 11
 be made. Available rooms are provided to qualified families as they arrive. If several eligible families arrive at once, priority is often given to families of active duty military members and families visiting patients with a severe medical condition. The medical center commander makes any final decisions.

A native of Brooklyn, N.Y., Zachary Fisher began working in construction at the age of 16. Shortly thereafter, he and his brothers Martin and Larry joined forces to form Fisher Brothers, which has grown into one of the real estate industry's premier developers. Fisher was ineligible for military service during World War II due to injuries sustained in a construction accident. Determined to do his part, Fisher aided the U.S. Coastal Service in building coastal fortifications. His wife Elizabeth entertained military troops in Europe during the war as a member of the USO tour. In the 1970s, while remaining active in the family business,

Zachary Fisher took a leadership role in a number of major projects. In 1978 he founded the Intrepid Museum Foundation to save the historic and battle-scarred carrier Intrepid from the scrap yard. Through his efforts, the vessel became the centerpiece of the Intrepid Sea-Air-Space Museum, which opened in New York City in 1982.

That year, Mr. Fisher also established the Zachary and Elizabeth M. Fisher Armed Services Foundation. Through the foundation, he made significant



contributions to the families of the victims of the bombing of the Marine barracks in Beirut in 1983. Since then, the Foundation has contributed \$25,000 each to numerous military families who have lost loved ones under tragic circumstances.

In 1990, Pauline Trost, wife of former Chief of Naval Operations Admiral Carlisle A. H. Trost, approached the Fishers with the idea of building

“comfort homes” on the grounds of some military medical facilities. The Fishers, who had witnessed first-hand the value of having families close by to help in the healing process, began the Fisher House program, contributing more than \$20 million to the construction of homes for families of hospitalized military personnel. Since the program's inception, more than 50,000 families have stayed in Fisher Houses.

The newest Fisher House is a 7,900 square foot two-story, the second built at the Landstuhl Regional Medical Center, the U.S. military's only major medical center outside the United States. The first Fisher house built at Landstuhl was dedicated in June 2001. When the Fisher family learned that U.S. military personnel injured or wounded in Afghanistan are normally sent to Landstuhl for their medical treatment, Arnold Fisher presented a proposal to the Foundation's Board of Trustees to immediately begin building a second home there. This newest building, which opened in December of 2002, is larger than the typical Fisher

House. It has 11 bedrooms and a manager's office, plus a family room.

Secretary of Veterans Affairs Anthony J. Principi recently recommended five more sites for Fisher Houses on the grounds of VA hospitals. Construction could begin as early as 2004 on the new sites.

“Fisher Houses provided a ‘home away from home’ for veterans and their families in their time of need,” said Principi.

The recommended sites are the Houston VA Medical Center in Texas and the VA North Texas Health Care System; the New York Harbor VA Health Care System, Brooklyn campus; the VA Palo Alto Health Care System in California; and the VA Puget Sound Health Care System in Seattle, Wash.

For information on Fisher Houses, go to <http://www.fisherhouse.org> on the Internet, or call toll-free (888) 294-8560. ■

Fisher House Facts

- ❖ Families served: **More than 50,000 million**
- ❖ Number of lodging days offered: **1.25 million**
- ❖ Average length of stay in 2001: **13.7 days**
- ❖ Average cost per day: **less than \$10**
- ❖ Six locations offer free lodging
- ❖ Saved families more than **\$40 million** in lodging costs, plus savings on subsistence and transportation costs
- ❖ There are **31 Fisher Houses** located on **17 military installations**.
- ❖ There are **5 Fisher Houses** located on VA medical centers across the U.S. and Germany

To find a location nearest your medical facility, go to <http://www.fisherhouse.org/Locations/locations.htm> or call toll-free (888)294 - 8560. ■

New Medical Shelters Promise Lighter

by karen fleming-michael
u.s. army medical research and
materiel command, fort detrick, md.

The Army's future medical shelters must meet specific parameters before a C-130 loadmaster will strap them down and send them to a deployment. They must require fewer flights and promise lighter loads for the airlifter.

For the past year, program managers at the Army Medical Materiel Development Activity have been working with the Army Medical Department Center and School to move the service away from its current deployable medical systems shelters to ones that are easier to deploy.

The new shelters are envisioned as a leap forward in shelter technology for fielding a next-generation forward surgical team shelter or a combat

support hospital with operating room capability, said Steven Reichard, USAMMDA project manager for the future medical shelter system.

"We're trying to get a smaller, lighter, more transportable package so it's easier to deploy," which is a major objective of the Army transformation, Reichard said.

"It comes down to the 'ilities' of mobility and transportability," said Mark Arnold, a USAMMDA engineer working on the future medical shelter system. "It takes too many airplanes to get a hospital into the field. And once they're in the field, it takes too long to get them set up and take them down."

Deployable medical systems shelters, fielded since 1987, can house combat support hospitals, field hospitals and general hospitals. Each shelter has different configurations of standard modules, such as operating rooms, laboratories, X-ray units and

wards.

Getting a deployable medical systems shelter ready is time-consuming, Arnold said, because they're heavy and bulky. It takes seven soldiers one hour to put up a shelter, and an entire hospital can take a week to set up.

What developers of the combat support hospital shelter hope to produce is a surgical shelter with a complete operating room outfitted with two surgical tables, medical equipment and a patient holding area — all in one container.

The new configuration for the shelter will prevent logistical mishaps.

"Right now, all the equipment and supplies are in aluminum boxes and are in their own shipping containers," Arnold said. "The new system eliminates the scenario of your shelter arriving, but waiting for a box of supplies that didn't arrive at the same time."

A second shelter, intended for use far forward in combat zones, will also be studied starting in 2003. Mobile Medical International Corporation will develop a "surgical suite in a box." Though it won't be as sophisticatedly equipped as the combat support hospital shelter, it will be ready to see patients in minutes and have the added features of environmental control and power generation systems.

Right now, developers for the combat support hospital shelter are working with Tennessee's Oak Ridge National Labs on creating a new International Organization for Standardization container, an 8- by 8- by 20-foot box, for the shelter. The container will be lighter and more movable.



Key to moving the shelters' containers is the new load-handling system version of the medium tactical vehicle, which resembles a flat-bed tow truck, complete with a crane and a platform that serves as a ramp for off- and on-loading containers. Once the load-handling vehicle rolls off the plane with a surgical shelter on its back, the shelter can be ready for patients in as little as three minutes, much like a Stryker brigade rolls off the plane fighting, Arnold said.

When the prototype container, sporting ballistic and chemical-biological protection, is complete in about a year, Oak Ridge will also tackle the tents that will travel in the containers. Working with shelter experts at the U.S. Army Soldier Systems Center in Natick, Mass., as well as the Army Medical Department Center and School, developers aim to have a lighter, more deployable shelter for users to examine as early as next year.

"We fight for space on C-130s with beans and bullets," Arnold said. "If we can reduce the number of flights it takes to ship a field medical hospital, taking 20 to 30 percent of the flights out of the requirement, it doesn't seem unreasonable to ask for space." ■

Particulate Matter

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Particles of this size have the potential to reach deep into the lungs. When found at high concentrations in the general environment, these particles have been associated with changes in lung function, damage to lung tissue, and the impaired ability to eject foreign matter via exhalation.

“It is extremely important to keep in mind that the critical dose one receives — that is, the amount of a contaminant necessary to induce some adverse health effect — is as much a function of the length of time an individual was exposed as is the actual concentration to which the person was exposed,” said Dr. Michael E. Kilpatrick, deputy director of the Deployment Health Support Directorate.

“In this case, Gulf War veterans were exposed to relatively high levels of particulate matter, that is, they frequently exceeded U.S. ambient air quality standards while serving in the Gulf area. However, the amount of time they were exposed to these levels was short when compared to occupational exposures which occur over a working lifetime,” added Kilpatrick.

According to the report, high particulate matter levels, from a health effects perspective, have been linked with allergic responses in the civilian populations of Kuwait and Saudi Arabia. Roughly 18 percent of the civilian population of Kuwait suffer from some form of respiratory complaints, usually asthma, compared to about six percent in the United States.

For Gulf War veterans, the inhalation of ambient levels of particulate matter observed in the Kuwait theater of operations could have resulted in several

acute symptoms and could have aggravated asthmatic conditions in some personnel.

“Typical short-term reversible symptoms were cold or flu-like and included cough, runny nose, eye and throat irritation, and shortness of breath. Skin exposures to sand and soot may have produced short-term reversible symptoms as well. Anecdotal information suggests that some servicemembers experienced rashes, scaling, and skin irritation,” said Shaughnessy.

Based on analyses, investigators determined the risk of adverse long-term health effects from the exposure to be minimal.

While the soot from the oil fires was a large contributor to the particulate matter levels, post-war analysis collected by the U.S. Army Environmental Hygiene Agency determined that more than 75 percent of the particulate matter measured originated from the sand that was common to the area. Because many U.S. troops spent much of their time in the desert, health specialists were concerned about the possible adverse health effects on U.S. troops associated with exposure to high levels of blowing and suspended sand. For some personnel with respiratory problems, the fine blowing sand did aggravate their symptoms.

However, not all of the respiratory complaints experienced by Gulf War veterans result from exposure to high particulate matter levels. Investigators found that epidemiological surveys determined that respiratory symptoms were more common among the troops who worked and slept in air-conditioned buildings than among those who lived in tents or open

warehouses.

Investigators conducted exposure assessments to examine the possible adverse health effects from exposure to particulate matter by Gulf War veterans. When making assessments of potential long-term or chronic effects from the inhalation of particulate matter, both cumulative and total doses must be taken into consideration. The methodology used to make the assessments estimates the cumulative exposure to which an individual is exposed and the total dosage, that is, the amount actually absorbed by the human body, that the individual accumulates over the period of exposure. Investigators concluded that the cumulative exposure and the total body burden dosages were below the general guidelines established by the EPA for the protection of human health and, therefore, chronic health effects would not be expected.

Although the results of the literature search and health risk analyses conducted during the course of this investigation suggest that long-term adverse health effects are not likely, investigators have recommended more research into understanding the potential long-term health problems in soldiers exposed to respirable desert dust and other pollutants. Additionally, researchers would like more information about the physical, chemical and/or biological properties of particles that might cause adverse health effects and how these particulates might interact with other contaminants to present a more potent health threat. ■

Veterans

— Continued from Page 6

of American war veterans — men, women, civilians who served in World Wars I and II, and the Korean, Vietnam and Persian Gulf wars. The center needs contributions of civilian volunteers, support staff, and war industry workers also.

Bartis said the amount of regular mail and the number of e-mails and phone calls vary from day to day, “but the response to this project has been enormous.”

“We get to know a lot of these people personally. That’s the fun part,” he said.

Aside from the thousands of items received from every day Americans each year, Bartis said the project has gained tremendous support from the corporate community as well.

The Veterans History Project’s official Web site lists more than 50 national partners and support organizations from every state. The military services contribute through offices such as the Army’s U.S. Center of Military History and the Naval and Marine Corps

Historical centers, as well as DoD’s official committee commemorating the 50th Korean War anniversary. Major national veterans associations are well represented also.

“This is not our project or the library’s project. This is the nation’s project,” Bartis said. “We want people of all walks of life to feel ownership of this project.”

To learn more about the Veterans History Project, visit <http://www.loc.gov/folklife/vets>. ■

The Best Revenge

Researcher In Hot Pursuit Of Vaccines To Halt Deployment Diarrheal Disease

by karen fleming-michael
u.s. army medical research and
materiel command, fort detrick, md.

he runs. The trots. The quick step. Montezuma's revenge.

Although not the most pleasant topic, diarrhea can debilitate, even kill, deployed soldiers.

Less-than-sanitary living conditions and foreign diets, teamed with few opportunities to wash after using the bathroom, let diarrhea-causing bacteria with names like *Shigella flexneri*, *Shigella sonnei*, *Shigella dysenteriae* and *Escherichia coli* flourish in the field, quickly disabling thousands and upending readiness.

In fact, according to the 1998 Army Science and Technology Master Plan, during Operations Desert Shield and Storm 57 percent of troops had at least one bout with diarrhea; 20 percent reported they were temporarily incapacitated by it.

To combat the foe, researchers in the Walter Reed Army Institute of Research's Department of Enteric Infections are developing new

vaccines to help deployed war-fighters combat the ubiquitous bacteria.

So far, the institute has four vaccines in the works.

"Ideally, the goal would be to have one vaccine that will protect against multiple pathogens that can easily be given to deploying soldiers," said Maj. David Katz, a senior clinical investigator at WRAIR. "So soldiers can take it before they deploy to an area, and they'll be protected."

A vaccine to combat *Shigella flexneri*, called SC602, was developed along with The Institute Pasteur. Since 1992 it has undergone clinical trials in the United States and Bangladesh.

"The wonderful thing about the *shigella* vaccines is ... the bacteria [used in them] are alive but weakened to diminish the amount of symptoms," Katz said. "The body thinks it's infected and gives an immune response, but you don't get infected like a natural infection because the bacteria don't spread from cell to cell."

Receiving the oral vaccine before deploying is key, Katz said.

"Most of the soldiers will get hit right when they arrive in a new area, either because they're eating on the economy or they're in a new area and their system has not been primed."

Another reason to give the vaccine ahead of time is because of potential side effects, said Dr. Thomas Hale, chief of the department of enteric infections at Walter Reed Army Institute of Research.

"The vaccine can cause some short-term fevers and mild diarrhea in 20 percent of the people who receive it, so soldiers need to take it well before they get on a plane,"

said Hale.

A vaccine for *Shigella sonnei*, which often attacks travelers and stateside daycare centers, is a possible stand-alone product, Hale said.

"This one vaccine could make a significant difference in the health of soldiers deployed to the Middle East [where 90 percent of outbreaks occur] and the developing world," continued Hale.

Drs. Malabi Venkatesan and

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Combat Off-load

KRTSANISI, GEORGIA — Members of the Georgian Commando Battalion perform a combat off-load at a training range in Krtsanisi, Georgia. The U.S. Army's 10th Special Forces Group (Airborne) is in Georgia conducting the Georgia Train and Equip Program, which will enhance the Georgian soldier's abilities in various battlefield techniques.

Photo by Staff Sgt. Justin D. Pyle



Smokin'

Through a haze of smoke and mortar fire, members of 2nd Company, Georgian Commando Battalion, move and attack the objective during a company level deliberate daylight attack at a training range in Vasiani, Georgia. 10th Special Forces Group (Airborne) is in Georgia conducting the Georgia Train and Equip Program, which will enhance Georgian soldiers abilities in various battlefield techniques.

U.S. Air Force photo by Staff Sgt. Justin D. Pyle

Ask the Doc

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rapid strep test, which only takes 10 to 20 minutes. If the result of the rapid test is negative, your doctor may do a follow-up culture to confirm the results, which takes 24 to 48 hours. If the culture test is also negative, your doctor may suspect you do not have strep, but rather another type of infection. The results of these throat cultures will affect what your doctor

decides to be the best treatment. Most sore throats are caused by viral infections, however, and antibiotics are useless against them.

Penicillin is considered the medicine of choice for treating strep throat because it has been proven to be effective, safe and inexpensive. If you are allergic to penicillin, there are other antibiotics your doctor can give you to clear up the illness. During treatment, you may start to feel better within four days. This

can happen even without treatment. Still, it is very important to finish all the medicine in order to prevent the complications described above. ■

Col.(Dr.) John W. Gardner, MC, FS., U.S. Army, serves as the program director of medical readiness in the Deployment Health Support Directorate. He received his medical degree in 1976 from the University of Utah and a doctorate in public health from Harvard University in 1981.

Smallpox

— Continued from Page 5
adverse event management, as well as many other issues. Additionally, each branch of service will have implementation plans specific for you and your particular situation.

We know that many of you don't have access to the Internet. If this is the case, contact the medical unit or facility you would normally use, to obtain information. Detailed training will be provided to all medical providers involved in the administration of the smallpox program, and should be able to answer specific questions or concerns.

Regarding the fact you have been previously immunized, the Centers for Disease Control and Prevention indicates vaccination provides a high level of immunity for about three to five years and decreases thereafter. If you are immunized again, your immunity will last even longer. For more information, visit the CDC's Web site on smallpox and bioterrorism at <http://www.bt.cdc.gov>.

Finally, there is some data to suggest that having been previously immunized against smallpox further decreases the chances of severe adverse reactions. Don't let me mislead you. This vaccine does have side effects and risks associated with it. Gather as much information

possible and talk to your health care provider to better understand the risks and benefits of this vaccine.

Thank you for your support and dedication. ■

Cmdr. Gene DeLara, Medical Service Corps, U.S. Navy, serves as the medical planner in the Directorate for Deployment Health Support. He has a Doctorate of Pharmacy degree and a Masters of Business Administration degree. DeLara is both a pharmacist and medical planner holding the 1805 Plans, Operations, and Medical Intelligence specialty code.

DIABETES AWARENESS:

Get a Head-To-Toe Checkup

by journalist 3rd class rebecca horton
national naval medical center
public affairs

According to the American Diabetes Association, 17 million Americans have diabetes, and about a third of them don't know it.

With its complications — blindness, kidney disease, amputations, heart attack and stroke — diabetes is the fifth leading cause of death by disease in the United States. The National Naval Medical Center's Diabetes Educator, Sue Marullo, said that since diabetes is the leading cause of blindness, it is important for everyone with this condition to get their eyes checked yearly.

"Diabetes is a metabolic disease in which the body does not produce or properly use insulin to regulate the level of glucose [sugar] in the blood," Marullo said.

According to the ADA, there are two types of diabetes, Type 1 and Type 2. Type 1, formerly called insulin-dependent or juvenile diabetes, often runs in families. Although it can occur at any age, it usually develops before the age of 30.

About 12,000 children in the United States get diabetes every year. People with Type 1 diabetes usually don't



U.S. Air Force photo by Staff Sgt. Tony R. Tolley
U.S. Air Force Capt. Michelle Koe, an optometrist from the 48th Aerospace Medicine Squadron, 48th Fighter Wing, RAF Lakenheath, United Kingdom, does a slit-lamp evaluation on Airman 1st Class Charles Everett from the 48th Equipment Maintenance Squadron's sheet metal shop. A slit-lamp evaluation is conducted to check for glaucoma, diabetes or high blood pressure.

produce insulin because pancreatic beta cells have been destroyed. Treatment of Type 1 diabetes requires a strict daily regimen that includes a carefully monitored diet, insulin injections and monitoring of blood glucose.

Type 2 diabetes, formerly called non-insulin-dependent or adult-onset diabetes, typically develops after the age of 45, but can appear earlier. People with Type 2 diabetes produce some insulin, but the body cannot use

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Breakfast: It's Essential for Adults and

by brian badura
bureau of medicine and surgery

The old adage that says "breakfast is the most important meal of the day" isn't just some old wives' tale.

Research over the years has shown the benefits of breakfast touch everyone, young and old.

"Studies have shown how eating breakfast benefits memory and overall health," said Lori Tubbs, a registered dietician and the nutrition program

manager at the Navy Environmental Health Center in Portsmouth, Va.

Tubbs said skipping breakfast robs your body of the fuel it needs to perform essential functions. It helps boost your body's energy level throughout the day, improving brain function, regulating your eating patterns and stimulating metabolism.

Think about it another way. Let's say you eat dinner at 7 p.m., skip breakfast the next day, and eat your next meal at noon. That's 15 hours

of depriving your body of important energy it needs to operate.

"Breakfast helps get your body's metabolism going and helps meet the recommended dietary intake of carbohydrates, fiber and protein," said Tubbs.

Your car needs fuel to run properly and so does your body. When you skip meals, your body must work extra hard to break down stored energy in order to keep going, which

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Surgery At Sea

Medical personnel perform corrective hernia surgery aboard the aircraft carrier USS Carl Vinson (CVN 70). Taking care of sailors at sea is one of the primary duties for Navy doctors and hospital corpsmen who provide an extensive medical services capability to any deployed battle group.

U.S. Navy Photo by Photographer's Mate 3rd Class Jeff Stanislowski

Diabetes

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it effectively. Treatment includes weight loss (many Type 2's are over-weight), proper diet, monitoring of blood glucose and exercise. Most cases are treated with oral medication or insulin injections.

"A simple blood test known as the Hemoglobin A1C [glycohemoglobin] is the best method to date for patients with diabetes in determining how well blood sugar is controlled over a three-month period," Marullo explained. "It measures the percent of sugars attached to red blood cells, with a six percent result being normal for people without diabetes. It's very important for patients to know their A1C level and goals, so they are able to be proactive in helping to prevent diabetes complications."

Tight control, according to the ADA, means keeping blood glucose levels as close to normal as possible — typically with levels falling between 80 and 120 mg/dl before meals and less than 160 mg/dl after meals.

"In real life, setting individual goals with your health care provider is critical," Marullo said. "Every little bit you lower your blood glucose level helps prevent complications.

"There are more than 2,000 diabetics

who are treated at NNMC or one of its tenant commands. More than 600 of those patients have what is considered uncontrolled diabetes, meaning they are at higher risk for complications," Marullo said.

"I believe that education is really the most important thing for diabetics to focus on. The more they know, the better they can take care of themselves. Knowledge is key to managing diabetes," Marullo said.

Marullo teaches diabetes patient education classes twice a month. In addition to discussing diabetes and the disease process itself, the class focuses on nutrition management; physical activity; understanding medications; monitoring blood glucose levels; preventing, detecting and treating acute and chronic complications through risk reduction; goal-setting; problem-solving; and psychosocial adjustment.

"Program participants say initial classroom education efforts help them better understand the disease, diagnosis, treatment options, combination therapies, medications and insulin needs, self-monitoring and the need for tracking overall care of their health," she said.

"The importance of annual eye and foot exams, as well as preventive testing

for kidney function, cholesterol levels and other health factors also is covered," she added.

Marullo said that class attendance has been great, with an average of 15 students in each class.

"The classes are not only for patients," she said. "I encourage corpsmen, nurses, spouses and other family members to attend."

Marullo is working toward getting program certification from the ADA. Class lengths will extend to three four-hour sessions, and topics will be more in-depth and more intense.

"Patients will also be able to establish personal goals during the course," she said. "We will be able to follow up with each patient to see if the class has helped them manage their diabetes."

Since ADA recognition also requires tracking specific outcomes, she said that the program will be tracking pre-class A1C and a three-month post-class A1C.

Feeling better and preventing future complications are two very good reasons to learn as much as possible about this disease. ■

Medical Care

U.S. Army Reserve Col. (Dr.) Jack Rule assigned to the 44th Task Force, Combat Support Hospital, Bagram Air Base, Afghanistan, sutures the thumb of a local Afghan worker. The hospital here provides care for all coalition forces involved in Operation Enduring Freedom, detainees and many of the local residents around the air base area from minor injuries to extreme trauma cases.

U.S. Air Force photo by Tech. Sgt. Stephen Faulisi



Vaccine

— Continued from Page 15
Antoinette Hartman from Walter Reed Army Institute of Research developed the oral vaccine, called WRSS1, that is currently in clinical trials in conjunction with the University of Maryland Medical School and the National Institute of Allergy and Infectious Diseases.

The Department of Enteric Infections at Walter Reed Army Institute of Research has teamed up with the Israel Defense Force for a vaccine trial evaluating WRSS1 this winter.

“Israel has cities that are very westernized, but almost everyone has a compulsory military obligation, so they go from cities to field posts and

the incidence of diarrheal disease is significant,” Katz said.

To combat the deadly form of diarrhea, dysentery — also called bloody diarrhea — WRAIR researchers are working with the Bloomberg School of Public Health at Johns Hopkins University to test the oral Walter Reed Shigella-Dysentery-1 vaccine, WRSD1.

The other diarrhea-causing bacteria WRAIR and the Navy Medical Research Unit researchers are trying to disable is *E. coli*. Whereas shigella bacteria invades a cell’s wall and moves from cell to cell to spread the disease, *E. coli* prefers to stick to the intestine’s lining, homestead and crank out toxins that cause diarrhea. To outsmart the unwanted tenant, researchers are trying to make antibodies that will prevent

squatters from colonizing because they can’t stick to the intestine. The vaccine’s been tested in a time-release capsule form as well as a transdermal patch.

“It should be easy for the soldier to use: Just pop the patch on and that’s it,” Katz said.

Though having one vaccine to combat all major forms of infectious diarrhea is a ways off, the quest to prevent soldiers from needing to run, trot and quick step will be Walter Reed Army Institute of Research researchers’ best revenge on Montezuma. ■

Breakfast

— Continued from Page 17
leads to deprivation of function in other areas, such as the ability to concentrate.

Some people believe skipping breakfast will help them lose weight. But according to studies, skipping breakfast often leads to overeating later in the day, which can actually result in a greater intake of calories.

Children also benefit greatly from eating breakfast. A 1998 joint study by Harvard Medical School and Massachusetts General Hospital found that school age children who eat breakfast have improved math grades, reduced hyperactivity and decreased absence when compared to children who did not eat breakfast.

If mornings are too busy for a hot cooked

breakfast, Tubbs recommends grabbing a piece of fruit or a container of yogurt to eat on the run.

“There are many products on the market today in convenient packaging designed to fit our busy lifestyles,” she added.

Try eating breakfast for a week. Chances are you’ll experience an improvement in the way you feel throughout the day. ■



Air Force Association
1501 Lee Highway
Arlington, VA 22209-1198
Phone: (800) 727 - 3337
<http://www.afa.org>

American Legion
1608 K St., NW
Washington, DC 20006
Phone: (202) 861 - 2700
<http://www.legion.org>

American Red Cross
17th & D Streets, NW
Washington, DC 20006
Phone: (202) 639 - 3520
<http://www.redcross.org>

AMVETS
4647 Forbes Blvd.
Lanham, MD 20706
Phone: (877) 726 - 8387
<http://www.amvets.org>

Association of the U.S. Army
2425 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 336 - 4570
<http://www.ausea.org>

Department of Veterans Affairs
810 Vermont Ave, NW
Washington, DC 20400
Phone: (202) 273 - 4300
<http://www.va.gov>

Disabled American Veterans
807 Maine St., SW
Washington, DC 20024
Phone: (202) 554 - 3501
<http://www.dava.org>

Enlisted Association of the National Guard
1219 Prince St.
Alexandria, VA 22314
Phone: (800) 234 - 3264
<http://www.eangus.org>

Fleet Reserve Association
125 N. West St.
Alexandria, VA 22314-2754
Phone: (703) 683 - 1400
<http://www.fra.org>

Marine Corps Association

715 Broadway Street
Quantico, VA 22134
Phone: (866) 622 - 1775
<http://www.mca-marines.org>

Marine Corps League
8626 Lee Highway, #201
Merrifield, VA 22031
Phone: (800) 625 - 1775
<http://www.mcleague.org>

National Association for Uniformed Services
5535 Hempstead Way
Springfield, VA 22151
Phone: (800) 842 - 3451
<http://www.naus.org>

National Committee for Employer Support of the Guard and Reserve
1555 Wilson Boulevard, Suite 200
Arlington, VA 22209-2405
Phone: (800) 336 - 4590
<http://www.esgr.org>

National Guard Association of the United States
1 Massachusetts Ave., NW
Washington, DC 20001
Phone: (202) 789 - 0031
<http://www.ngaus.org>

Naval Reserve Association
1619 King St.
Alexandria, VA 22314-2793
Phone: (703) 548 - 5800
<http://www.navy-reserve.org>
Navy League
2300 Wilson Blvd.

Arlington, VA 22201
Phone: (800) 356 - 5760
<http://www.navyleague.org>

Non Commissioned Officers Association
225 N. Washington St.
Alexandria, VA 22314
Phone: (703) 549 - 0311
<http://www.ncoausa.org>

Reserve Officers Association
1 Constitution Ave., NE
Washington, DC 20002
Phone: (800) 809 - 9448
<http://www.roa.org>

Retired Officers Association
201 N. Washington St.
Alexandria, VA 22314
Phone: (800) 245 - 8762
<http://www.troa.org>

Veterans of Foreign Wars
200 Maryland Ave., NE
Washington, DC 20002
Phone: (202) 543 - 2239
<http://www.vfw.org>

Vietnam Veterans of America
8605 Cameron Street, Suite 400
Silver Spring, MD 20910-3710
Phone: (301) 585 - 4000
<http://www.vva.org>

OTHER RESOURCES

By Phone

Direct Hotline for Servicemembers, Veterans and Families
(800) 497 - 6261

Department of Veterans Affairs
(800) 827 - 1000

VA Gulf War Registry
(800) 749 - 8387

VA Benefits and Services
(877) 222 - VETS

On the Web

Department of Defense
<http://www.defenselink.mil>

Department of Veterans Affairs
<http://www.va.gov/>

DeploymentLINK
<http://deploymentlink.osd.mil>

GulfLINK
<http://www.gulflink.osd.mil>

TRICARE
<http://www.tricare.osd.mil/>