

# NAVY MEDICINE

SPRING ISSUE

Official Magazine of U.S. Navy and Marine Corps Medicine

## ANNIVERSARY EDITION

I am a Navy Corpsman | 10 • Survivor | 28  
The History of Navy Medicine Magazine | 52

# NAVY MEDICINE

Official Magazine of U.S. Navy and  
Marine Corps Medicine

Vol. 105 • No. 3 SPRING ISSUE

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NAVY MEDICINE is the professional magazine of the Navy Medical Department community. Its purpose is to educate its readers on Navy Medicine missions and programs. This magazine will also draw upon the medical department's rich historical legacy to instill a sense of pride and professionalism among the Navy Medical Department community and to enhance reader awareness of the increasing relevance of Navy Medicine in and for our nation's defense.

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##### SUBMISSION REQUIREMENTS:

Articles must be between 600-1,000 words.

All articles must be present tense/active voice.

Photos must be minimum 300 dpi.

Photos showing action are preferred.

All photos must be accompanied by a caption and photo credit.

##### Subjects considered:

**Scuttlebutt:** Stories about activities at MTFs and the field.

**Photo Album:** Action shots from across Navy Medicine.

**Feature Articles:** Stories featuring interesting contributions of Navy

Medicine to military operations including everything from combat support to Humanitarian Relief/Disaster Response will be considered. Please contact Paul Ross (paul.ross@med.navy.mil) for current theme of issue in progress.

**R & D and Innovations:** Any new processes and/or research and development news.

**Quality Care:** Anything that improves the quality of care for our patients.

**IT, QA:** Any articles showing how Navy Medicine is utilizing the electronic age.

**Shipmates:** Anything interesting about our shipmates working in the health care field in the Department of the Navy.

All submissions must be accompanied by complete contact information for author. In the event there is more than one author please assign one author to be primary correspondent.

#### Feedback Welcome

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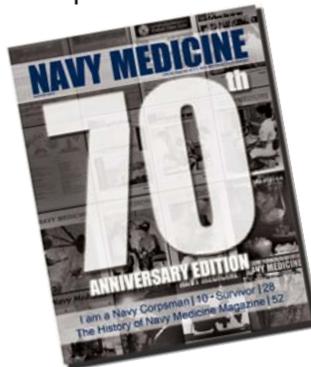
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### On the Cover

On 5 March 1943, Navy Medicine Magazine was born as a 25-page, bi-weekly "digest of timely information" called "The BUMED News Letter." Originally a product of the BUMED Research Division and edited by Capt. William Winthrop Hall, the News Letter served as an information bulletin of "current" Navy medical research and news from the field. In its 70-year history the publication has evolved from a modest black and white letter pressed newsletter to the glossy four-color quarterly it is today. (Graphic by Paul R. Ross)

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# PARTNERSHIPS IN HEALTH DIPLOMACY

**T**he U.S. Navy and Marine Corps are “America’s Away Team,” defending America forward and from the sea — Navy Medicine is a key player on that team. When it comes to global engagement, our Navy Medicine personnel are well suited to execute that mission. We take with us our professional training, our cultural ethos, and our good will. We have found that preventive medicine and health care are some of the best ice breakers when it comes to engaging with other cultures, organizations and countries around the globe.

This month, I would like to talk about Navy Medicine’s many partnerships in health diplomacy. Our partnerships with health care organizations, local governments and militaries extend both nationally and internationally. We partner to find new and innovative ways to treat diseases – partnerships that extend worldwide past the front door of our labs and far beyond the brow of our hospital ships. Partnerships in some host nations have lasted for over 50 years and these continue to enhance health and foster trust. We conduct training exercises with militaries around the globe. We learn so much from each other when we work together and understand the importance of interoperability.

I want to highlight a couple of partnerships that are really thriving and making a huge difference. First, our Naval Health Research Center in San Diego, Calif., is engaged with the Mexican government in a joint effort to conduct febrile respiratory illness (FRI) surveillance along both sides of the US-Mexico border. (FRI) is a common reason for respiratory failure and admission to intensive care units. Surveillance sites cover six border clinics in California and Arizona and provide annual op-

portunities for promoting training and scientific exchanges between Mexican and American lab technicians and public health staff. This collaborative effort is supported in part through enhanced cooperation between NHRC, Department of State Biosecurity Exchange Program, Centers for Disease Control and Prevention, and California Public Health.

We have also been working with the Mexican Navy on hyperbaric training with great success. Last month, Navy Medicine, via the U.S. Embassy in Mexico, received a request from the Mexican Navy to conduct a one-week course on hyperbaric medicine methods and techniques for 30 Mexican Navy physicians, nurses and divers. As a result of this successful endeavor, Malaysia has requested the same training course for September 2013. We are definitely looking forward to this and other partnerships.

Navy Medicine continues to partner with other militaries from many nations to discover more about infectious diseases and conduct research to protect our homeland against biological threats. In particular, NHRC has established and maintained direct collaboration with the Singapore Armed Forces’ Defense Medical and Environmental Research Institute (DMERI) for surveillance of FRI. These partnerships will lead to improved health care worker protection, reduction of transmission to other patients, and prevention of transmission in the community. It is truly remarkable work.

Another example of Navy Medicine working with medical organizations and



labs around the globe to build partnerships is Naval Medical Research Unit No. 6 in Peru. NAMRU-6 is collaborating to set up influenza cohorts in Ecuador, Peru and Bolivia, so the results can be shared among countries. In addition, they are enhancing local laboratory capacity for influenza diagnostics in Ecuador, Paraguay and Peru, in accordance with the World Health Organization’s International Health Regulations. I applaud the great work being done to build medical partnerships with all of our labs – overseas and here in the U.S. These partnerships continue to lead to great medical discoveries.

As HIV/AIDS continues to be an ongoing threat in many countries and regions throughout the world, Navy Medicine is there to answer the call. Navy Medicine, designated as the Executive Agent for the DoD HIV/AIDS Prevention Program (DHAPP), provides the world’s largest source of HIV assistance to militaries and works with a worldwide cadre of military HIV experts to combat the harm and devastation that HIV inflicts on the health and readiness of the world’s military popula-



Vice Adm. Matthew L. Nathan, U.S. Navy surgeon general and chief, U.S. Navy Bureau of Medicine and Surgery, speaks to over 200 Navy Medicine personnel worldwide at the first virtual Navy Surgeon General Leadership Symposium. Nathan discussed his expectations, priorities, challenges and the direction of Navy Medicine through 40 video teleconferencing sites, more than 100 audio lines, and with on-site participants at the event. (Photo by Valerie A. Kremer)

tions. There are many examples of their outstanding work spanning the globe. In Mozambique, for instance, DHAPP and Navy Medicine personnel work with the Armed Forces for the Defence of Mozambique (FADM) to provide a peer educator-driven, evidence-based “Prevention with Positives” programs that are aimed at reducing risky behavior among HIV-positive soldiers and civilians. The FADM is also one of the first African militaries to begin addressing gender-based violence within its troops.

We recently established Navy Medicine’s Global Health Engagement Office to better coordinate and synchronize our

global health engagement efforts across the Navy Medicine enterprise and in support of our Navy and Marine Corps Components. Navy health personnel are engaged in bilateral and multilateral training throughout the world in military-to-military education in topics such as pandemic influenza preparedness, naval survival training, provision of care in austere environments, hyperbaric medicine and other specialties. The Global Health Engagement Office is working to ensure Navy service members who have a role in GHE activities have the competencies and training necessary to succeed in all of our global

health related missions.

To sum it all up, our Navy Medicine personnel are making a difference around the globe by being ambassadors of global health. We are able to both share and learn from our world partners to better lives and build relationships with nations. The work you do makes our military, the United States and the world a stronger and safer place for all of us. As always, I am extremely proud to be your shipmate. Thank you for your service and as always, it is my honor and my privilege to be your surgeon general.

*--Vice Adm. Matthew L. Nathan*

# DIPLOMACY AND SOCIAL MEDIA

Are you a diplomat? Preventing wars is just as important as winning wars. The Navy is 100% on watch protecting the global way of life through the air, land, and sea. The Navy prevents and solves conflict with diplomacy. Every Sailor is a part of Navy diplomacy; your role at home or abroad has critical impact on our diplomacy efforts. In particular, I want to discuss your diplomacy role at home. How you communicate, on and off duty, has the ability to impact our role as diplomats and ambassadors of our great nation.

Communication over the years has changed drastically, especially since the establishment of social media. Sentence structure and complete thoughts have changed to unidentifiable acronyms and fragmented sentences. Emoticons have replaced how we feel, express, and show our emotions. Perhaps the most important is the ability for social media to allow instantaneous, active communication with a simple keystroke or a click of the mouse. This action engages thousands of people at once, in only a few seconds. This instantaneous communication is a blessing for family and service members separated by distance, improving communication for Sailors stationed or deployed overseas. However, this type of communication can be used, most times unknowingly, in a negative manner.

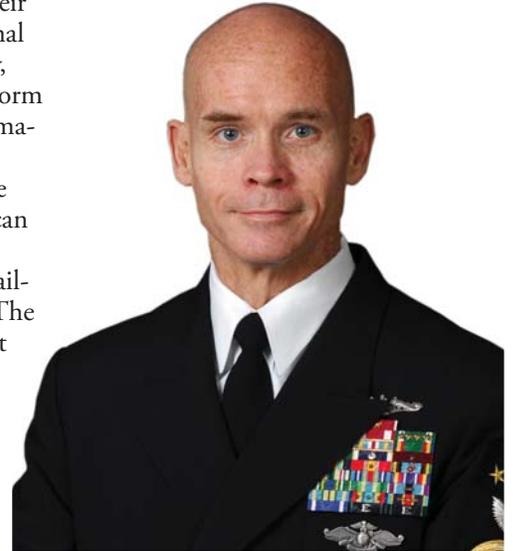
As social media influences the world, we are now seeing different types of information that is far more personal and intimate. People all over appear to

be more liberal with personal details, to include frequent status updates of their lives, expressed emotions, and personal views on public situations. For many, social media has become the social norm and unfortunately, this type of information sharing has provided a new and faster way to communicate with little to no control of the ripple effects it can cause.

When we join the Navy, we are Sailors 24 hours a day, 365 days a year. The citizens of our Nation expect the best from us at all times. Sailors of years past would never think of taking out a newspaper advertisement voicing their personal opinions, posting an inappropriate picture all while representing themselves as a Sailor, but some don't think twice of doing this very same thing with today's social media. The irony is newspapers have far less visibility than the internet, but that seems to be of little concern to some.

Social media is not to blame for a Sailor's individual lack of judgment and it does have its benefits. I recently just launched my own social media page on Facebook. Within one month, this page has reached over 19,000 people, from different backgrounds and from all areas of the globe. Imagine if this page were to contain information that potentially threatened national security, damaged our diplomatic relationships, or crossed the lines of our Core values?

Our nation calls on our Maritime forces to build confidence and trust among nations through collective se-

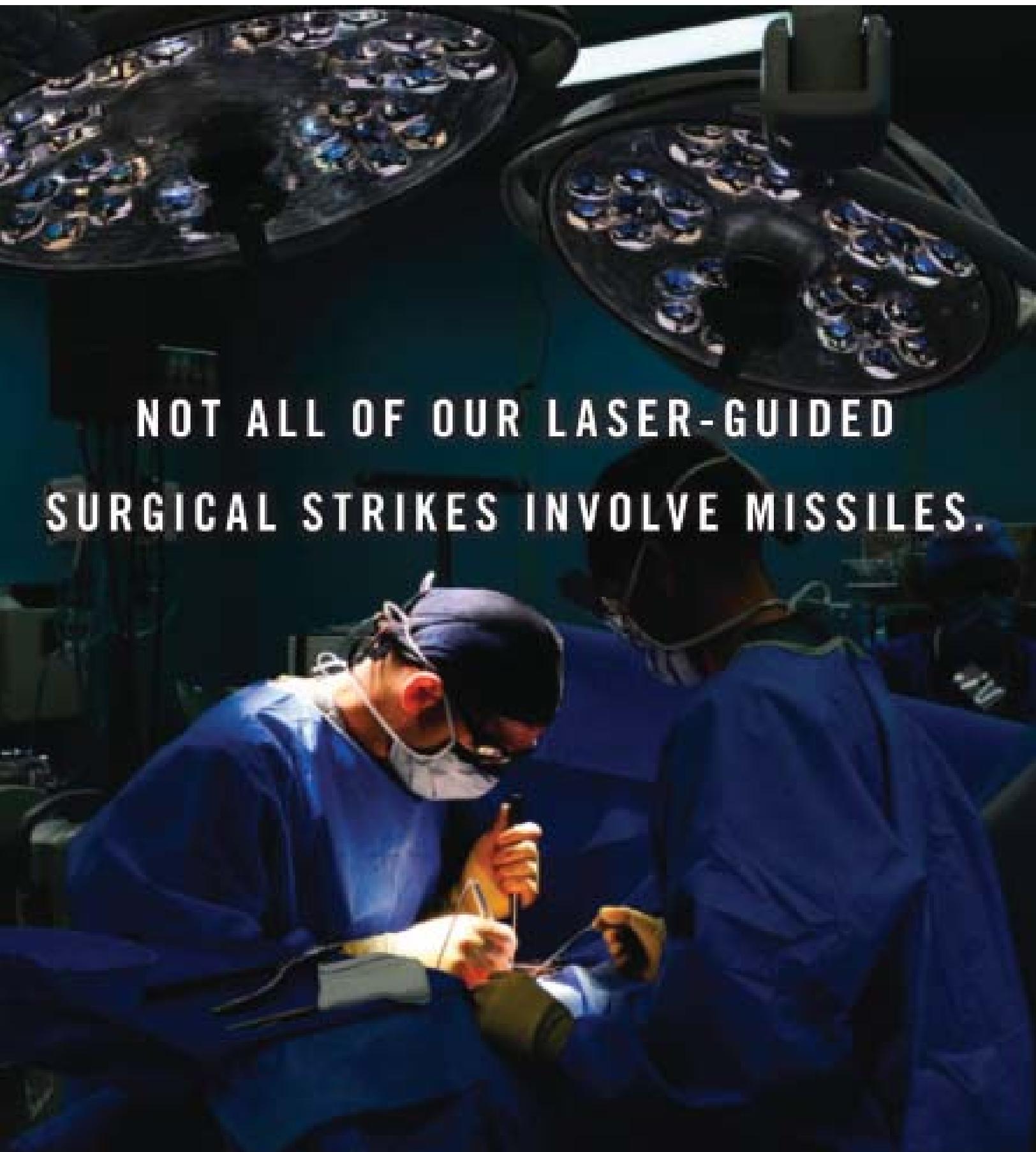


curity efforts that focus on common threats and mutual interests. Our ability to respond to crisis situations is built on the trust and cooperation earned from our joint operations. Understand that this trust is established over time and our participation is continuously evaluated. We now live in a world where personal opinions painted on social media products are now globally influencing the trust we have worked so hard at creating.

Right now, your Navy is 100% on watch protecting our national interests and preserving the rights of global freedom and social media can be used in positive ways to contribute to moral and mission success. We must ensure that it does not disrupt our mission accomplishment or detract from the many positive things our Sailors do, day in and day out. I ask each of you to police your ranks and rid yourselves of media that would jeopardize our ability to carry out the mission. We are all diplomats for our great nation and every American deserves the best from each of us. We should all be proud to wear that title.

-- Force Master Chief  
Sherman E. Boss

## When we join the Navy, we are Sailors 24 hours a day, 365 days a year.



**NOT ALL OF OUR LASER-GUIDED  
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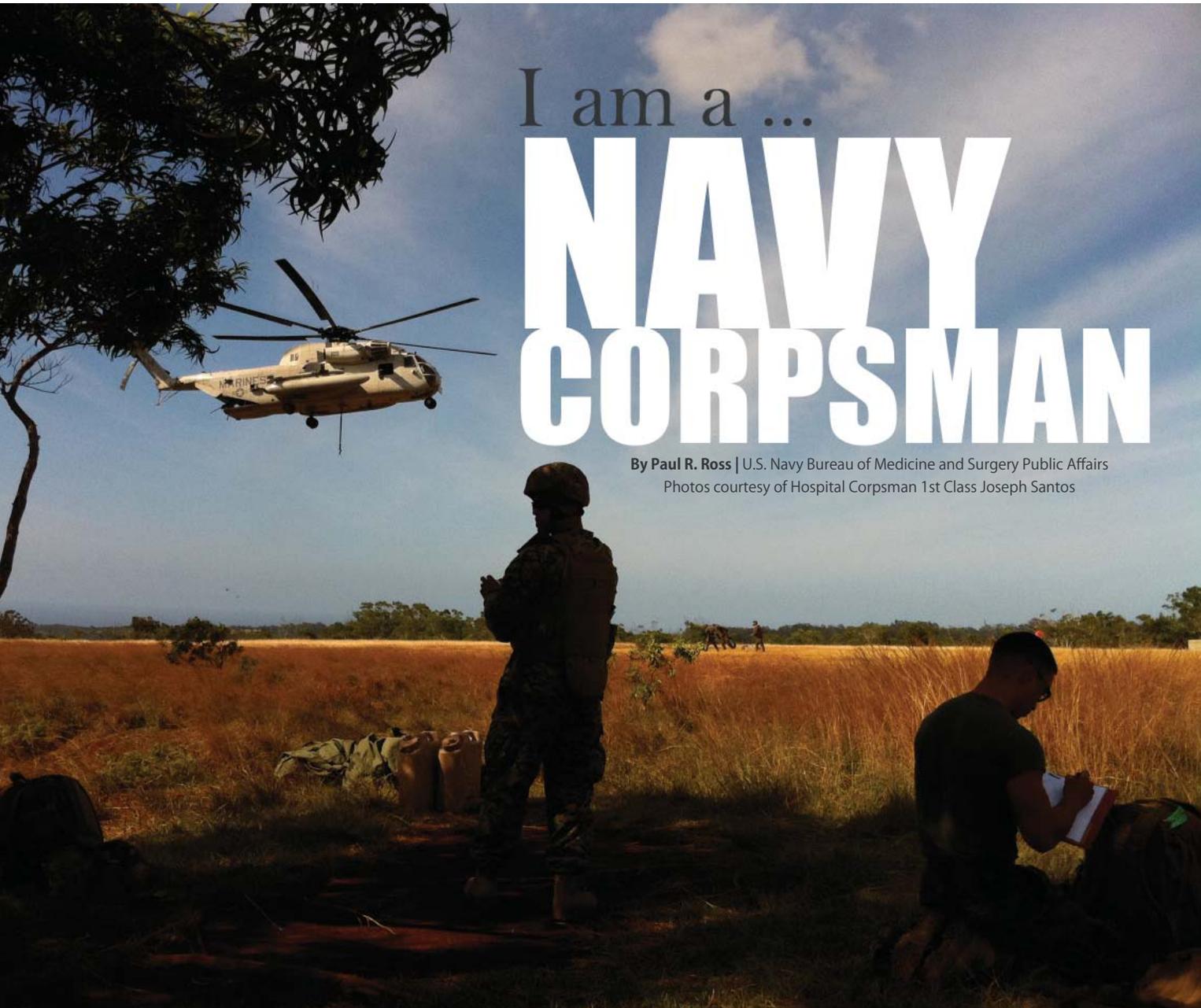
The adverse health effects from bath salt use can range from agitation, lack of appetite, kidney failure, muscle spasms, severe paranoid delusions, and psychosis. Several cases of long-term inpatient hospitalization and suicide have been reported.



For more information log on to  
<http://www.med.navy.mil/Pages/Serious.asp>

# BATH SALTS

## ... IT'S A NIGHTMARE



# I am a ... NAVY CORPSMAN

By Paul R. Ross | U.S. Navy Bureau of Medicine and Surgery Public Affairs  
Photos courtesy of Hospital Corpsman 1st Class Joseph Santos

Hospital Corpsman 1st Class Joseph Santos, Marine Aircraft Group 24, was recently selected as Pacific Fleet Sea Sailor of the Year. The corpsman has deployed to combat three times — twice to Iraq and once to Afghanistan.

*Editor's note: This is part one of a three-part series featuring individuals who serve as Navy hospital corpsmen.*

**A** 16-year old picks up a magazine and flips through the glossy pages. He stops at an article about a heroic Sailor — a Navy corpsman — who ran through a minefield to save the Marines he served with during Operation

Desert Storm.

For some people, the story would be something they forget about as quickly as they read it — just another news article. But for one boy growing up in Guam, it was the catalyst to his career.

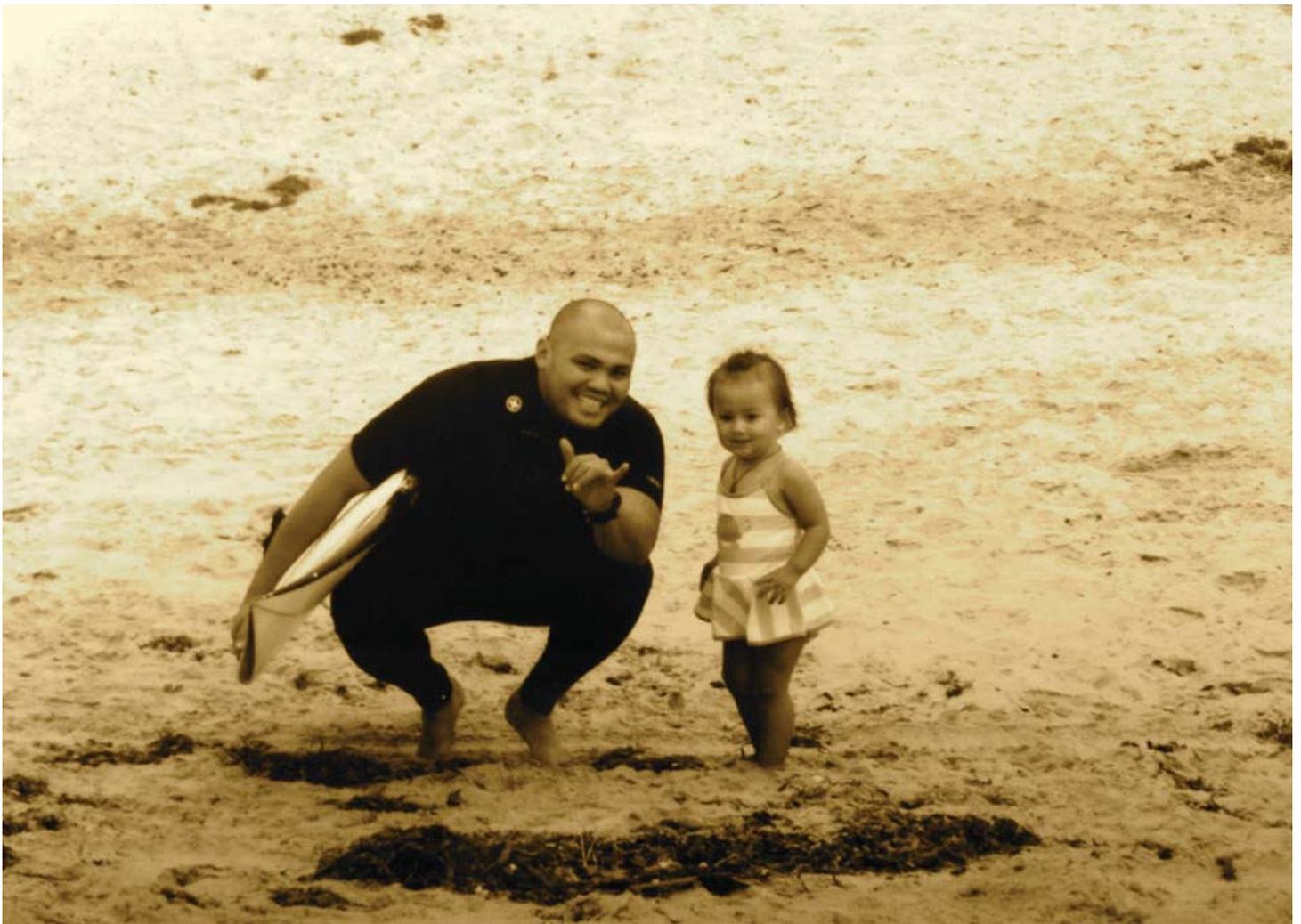
Hospital Corpsman 1st Class Joseph Santos enlisted in the Navy a year after reading that article and moved to the United States in 1999 to begin what is now a 13-year life in the Navy. The corpsman, who is stationed with Marine Aircraft Group (MAG) 24 at Marine

Corps Base Hawaii, is a Purple Heart recipient and was recently selected as Pacific Fleet Sea Sailor of the Year.

### Seeking Adventure

Santos, the youngest of nine children, was the only one of his siblings to join the military and did so because he craved something different from his life on the island nation of Guam.

“I needed a change of life,” Santos said. “I needed better job opportunities. I wanted to grow up. (Life in Guam) was simple. It was laid back. It was the



Hospital Corpsman 1st Class Joseph Santos, who grew up in Guam, has a unique love of the ocean. He teaches other to surf and paddle board from his current duty station at Marine Corps Base Hawaii.

same old stuff. Just a slow life style — a beach life style. But I wanted more adventure.”

While the Navy would provide the adventure he was seeking, he knew that the job of Navy hospital corpsman would provide something greater than adventure.

“I wanted to help people,” Santos said. “I wanted to save lives. I thought about how much I wanted to do a job like that.”

**From the Battlefield**

Throughout his 13-year career he would find himself deployed beside Marines in combat three different times — twice in Iraq and once in Afghanistan. In 2004, while deployed to Fallujah he earned his Purple Heart.

“I received wounds and shrapnel to my hand and wrist on March 26, 2004

during an ambush in a firefight in Fallujah on the streets,” Santos said.

But it was later that same year when

Santos played a vital role in doing what he became a corpsman to do — save lives.

**“We saved a lot of guys that day, and unfortunately a lot of Marines didn’t make it. A lot of close friends were lost.”**

- Hospital Corpsman 1st Class Joseph Santos



Hospital Corpsman 1st Class Joseph Santos, Marine Aircraft Group 24, catches a wave in Hawaii.



Hospital Corpsman 1st Class Joseph Santos poses with his family next to the ocean.

“On Sept. 6, 2004, a large convoy got hit by a vehicle-borne IED (improvised explosive device),” Santos said. “It hit the second truck, which had the platoon commander, about 14 Marines and 12 Iraqi National Guard. The IED hit the truck and we had a mass casualty. We had about 10 mortally wounded and the rest of the guys were just scattered throughout the zone.”

Santos would be the only corpsman on-scene for the first ten minutes after the attack.

“I was in the third truck,” Santos said. “We pulled up to the scene. We started pulling our guys out. We pulled a bunch of guys out and set up a casualty collection point. We went to work. We were running out of supplies. I was using guys’ individual first aid kits and a lot of tourniquets.”

Soon, other medical personnel arrived to assist and bring more supplies.

“We saved a lot of guys that day, and unfortunately a lot of Marines didn’t make it,” Santos said. “A lot of close

friends were lost.”

For Santos, the respect he has earned from serving beside his Marine brethren isn’t something he takes lightly.

“It’s a great honor to be trusted like that,” Santos said. “It’s something that’s earned from your guys and being there. It’s earned through trust.”

#### **Mother, Mother Ocean**

Outside of serving as a corpsman, Santos has another passion — the ocean. Growing up in Guam gave Santos a unique connection to the blue, salty waters that surround his childhood home, and the place he now calls home — Hawaii.

“Growing up around the ocean, it’s everything,” Santos said. “It’s a food source. It’s fun. It’s my happiness.”

His love of the ocean isn’t something he keeps to himself.

“I take guys out and teach them how to surf,” Santos said. “I make them understand what surfing is all about and about the ocean. I coach paddling for beginners and kids.”

#### **Success and Respect**

In order to be successful as a Navy corpsman, you have to be a leader — someone who can be trusted.

“HM1 Santos is a Sailors-Sailor,” said Chief Hospital Corpsman Frank



Hospital Corpsman 1st Class Joseph Santos cleans the wax from his surf board.

Dominguez, lead chief petty officer for MAG-24. “He shows pride in everything that he does. He leads from the front and by example. Part of what makes him a great corpsman is how he treats other. He makes everyone feel like they are family. He is well respected by both Marines and Sailors.

The sentiment is shared by the Marines he has deployed beside.

“Doc Santos is one of the best Navy corpsmen I’ve had the pleasure of serving with,” said Marine Staff Sgt. Joshua Noel, CH-53E crew chief/flightline quality assurance representative. “He always maintains a very high level of professionalism, while at the same time has a very approachable demeanor. No matter how busy he was, he would always take the time to follow-up with his patients and ensure they were receiving the care they needed.”

### The Extra Mile

Part of the reason some choose careers in the medical field is because of their unrelenting willingness to help those in need. This was the case when some Marines in Santos’ unit showed signs of suicidal ideation.

“Doc Santos did an incredible job handling those situations,” said Noel. “I feel he went above and beyond with those Marines. As those Marines were getting separated from the unit and sent back to the States, Doc Santos gave incredible amounts of his personal time to see to it that they left Afghanistan on as much of a positive note as possible.”

There were no “working hours” for Santos as he stayed committed to his Marines — it was 24-hour responsibility.

“He gave up his personal space, privacy and time by allowing them to

bunk above him during their last days in country,” Noel said. “This enabled him to be able to be there for them at a moment’s notice and I believe it showed those Marines that there are people who care and will go the extra mile for them.”

### Love of the Job

But for Santos, this is the precise reason he continues to serve. The relationships he has forged are the reasons he loves being a Navy corpsman.

“It’s the camaraderie we develop,” Santos said. “It’s the friendship and the brotherhood.”

If he had it his way, his life would always be the Navy. But what else would you expect from some who lives to serve others.

“If I can promote and stay in longer I would,” Santos said. “I’d definitely do this for my entire life.” +

# MEDICAL EVACUATION DRILL



Story and photos by Lance Cpl. Terence Brady  
III Marine Expeditionary Force / Marine Corps Installations Pacific

Marines and Sailors with 3rd Battalion, 12th Marine Regiment, transport a simulated casualty to an evacuation site as part of a medical evacuation drill at the Ojojihara Maneuver Area on mainland Japan. During the drill, Marines and Navy corpsmen rehearsed the proper procedures for assessing, treating and transporting casualties from the field to the next level of care.

**M**arines and Sailors with 3rd Battalion, 12th Marine Regiment, conducted a field medical evacuation drill at the Ojojihara Maneuver Area on mainland Japan as part of Artillery Relocation Training Program 12-4.

The medical evacuation drill is

regularly scheduled training prior to the beginning of live-fire artillery exercises such as ARTP 12-4 to assess the battalion's ability to treat injuries in a field environment while allowing medical personnel to develop skills for emergencies.

"Being basic corpsmen, our personnel have much to learn during field operations such as this," said U.S. Navy Lt. Suraj Trivedi, medical officer for 3rd Bn., 12th Marine Regiment, 3rd Marine Division, III Marine Expeditionary Force. "Training in the climate and environment here at the maneuver area gives them an opportunity to enhance their techniques and experience weather and terrain they don't typically operate in."

The corpsmen have been through

medical courses to deal with common injuries in the field, so making the drill as realistic as possible was very important, Trivedi added.

During the drill, Navy corpsmen were presented with various scenarios involving simulated casualties with injuries such as broken bones or concussions they were required to assess, treat, and transport to the next level of care.

"The drill was great training for us and very challenging," said Navy Corpsman 3rd Class Mark Boddy, a corpsman with the battalion. "It allowed us to think and act outside of normal procedures we are accustomed to."

The corpsmen worked in conjunction with the Japan Ground Self-Defense Force for transportation of the



Marines and sailors with 3rd Battalion, 12th Marine Regiment, assess and treat a simulated casualty as part of a medical evacuation drill at the Ojojihara Maneuver Area on mainland Japan.

simulated casualties from the maneuver area to a local hospital.

“The drill benefits everyone participating in ARTP 12-4,” said Trivedi. “The Marines learn how to respond to emergency situations, while the corpsmen worked with Japanese forces to practice organizational skills and procedures for treating patients and casualties.”

The exercise gave the corpsmen an opportunity to display their abilities and proficiency in a field environment.

“It was very impressive to see the professionalism and proficiency the corpsmen exhibited,” said Lt. Cmdr. Robert Lovern, the operational stress control and readiness psychiatrist for 3rd Marine Division. “They identified several potential trouble areas, and the medical staff worked together to overcome them, which is a very important ability to develop when conducting bilateral training.”

“It allowed us to think and act outside of normal procedures we are accustomed to.”

- Navy Corpsman 3rd Class Mark Boddy

The drill was a great way for the Marines, corpsmen and Japanese forces to work together while ensuring the corpsmen are ready to treat casualties in the field, Trivedi added.

“Because of the necessity of field-

ready corpsmen during these exercises, our goal is to run this drill more often during training on Okinawa,” said Trivedi. “It will give the Marines and corpsmen more opportunities to develop skills before going on exercises.” +

# A LITTLE JOY

## NMCSD's smallest baby goes home

By Mass Communication Specialist 2nd Class (SW/AW) John Philip Wagner, Jr. | Naval Medical Center San Diego Public Affairs



Marine Cpl. Monica Lovings, assigned to Marine Corps Base Camp Pendleton's Headquarters and Service Company, holds her four-month-old son Jayce Boelk while father Allen Boelk holds his hand in the Neonatal Intensive Care Unit at Naval Medical Center San Diego. (Photo by Mass Communication Specialist 2nd Class John Philip Wagner, Jr.)

**T**he birth and homecoming of a baby is always a very special time for any family. But for one couple whose son spent more than 126 days in Naval Medical Center San Diego's (NMCSD) Neonatal Intensive Care Unit (NICU), taking him home for the first time on Valentine's Day made his discharge even better.

Jayce Odin Boelk, son of Marine Cpl. Monica Lovings and former Marine Cpl. Allen Boelk, was born on Oct. 11, 2012 weighing 13 ounces and measuring 10.25 inches, making him the smallest known baby born at NMCSD, according to NICU staff.

Micro preemies like Jayce, who are born at less than 28 weeks and weighing 1,000 grams (2.2 pounds) or less, are prone to numerous medical is-



Jayce Boelk, son of Allen Boelk and Marine Cpl. Monica Lovings, assigned to Marine Corps Base Camp Pendleton's Headquarters and Service Company, receives a bath in the Neonatal Intensive Care Unit at Naval Medical Center San Diego. (Photo courtesy of Monica Lovings)



Allen Boelk and Marine Cpl. Monica Lovings, assigned to Marine Corps Base Camp Pendleton's Headquarters and Service Company, spend time with their son Jayce Boelk in the Neonatal Intensive Care Unit at Naval Medical Center San Diego. (Photo courtesy of Monica Lovings)



Marine Cpl. Monica Lovings holds her four-month-old son Jayce Boelk in the Neonatal Intensive Care Unit at Naval Medical Center San Diego. (Photo by Mass Communication Specialist 2nd Class John Philip Wagner, Jr.)

sues including apnea of prematurity (short periods of stopped breathing), jaundice (a yellowing of the skin) and other such challenging situations requiring expert medical treatments.

NMCS D's NICU cares for approximately 550 premature babies annually. Micro preemies are kept in the NICU until their original due date of 40 weeks gestation to ensure these babies can breathe on their own, maintain their own body temperature in a crib, eat successfully from a bottle or breast feed and gain weight prior to being discharged.

"I am very proud of my staff for helping take care of this baby and helping him survive," said Cmdr. (Dr.) Eileen M. Hoke, NMCS D's NICU director.

Despite his small size, Jayce overcame all these medical hurdles and was finally able make the long-anticipated journey home Feb. 14.

Although watching her tiny son struggle to survive was an emotional experience, Lovings said there was a silver lining in the experience.

"Taking our son home on Valentine's Day is awesome; we thought this day would never come," said Lovings. "The NICU staff gave us hope ... they gave us the best support possible. They were definitely on his side."

For more information on Naval Medical Center San Diego, visit <http://www.med.navy.mil/sites/nmcsd>, [www.twitter.com/NMC\\_SD](http://www.twitter.com/NMC_SD) or [www.facebook.com/NMCS D](http://www.facebook.com/NMCS D). +



Hospital Corpsman 2nd Class Harold D. Sylvester tests samples of water to ensure it is safe for drinking at Ban Chan Krem, Kingdom of Thailand, during exercise Cobra Gold 2013. Testing samples of drinking water is just one of the many duties Sylvester does to ensure the health and safety of Marines and Sailors.

# CORPSMAN ENABLES FIELD TRAINING

Story and photos by Lance Cpl. Adam Miller | III Marine Expeditionary Force / Marine Corps Installations Pacific

**W**hen Marines and Sailors go to the field, whether they are conducting training or are in a combat environment, they need food, water and shelter just like everyone else. But do they think about what it takes to ensure the food and water is safe to consume and that their shelter is safe to sleep in? The short of it is: they don't have to.

They do not have to worry about the safety of their food, water and shelter because that is what Hospital Corps-

man 2nd Class Harold D. Sylvester, and others like him, does every time he is in the field, and it was no different during exercise Cobra Gold 2013 at Ban Chan Krem, Kingdom of Thailand.

Sylvester is a hospital corpsman and preventive medicine technician with Headquarters and Service Company, 1st Battalion, 3rd Marine Regiment, which is attached to 4th Marines, 3rd Marine Division, III Marine Expeditionary Force, as part of the Marine Corps' unit deployment program.

During Cobra Gold field training, Sylvester works from before the sun rises until well past sunset, ensuring the water

and food Marines and Sailors consume is safe, and the shelter under which they reside is free of disease-carrying pests like mosquitoes and flies.

"His long-term planning, precise execution and superior leadership have been nothing short of phenomenal," said Chief Hospital Corpsman Sanket S. Sadalge, the battalion aid station senior enlisted leader. "HM2 Sylvester embodies what it means to have unparalleled technical expertise."

Sylvester initiated a health safety certification process that local establishments where Marines and Sailors eat are required follow. This had never been

done before at Ban Chan Krem.

"It's a testament to the type of Sailor he is and the dedication to his profession," said Saldage.

Every day he runs a series of tests on all water sources used by the Marines and sailors, not only at base camp but at the firing ranges as well.

"I ensure the drinking water is free of communicable diseases after it has been pumped and filtered from a nearby pond; it is not safe for drinking otherwise," said Sylvester.

Sylvester is responsible for inspecting Marines' and Sailors' food and water. He also ensures the use of proper disposal procedures, mitigating the health risks caused by disease spreading insects.

"I inspect the few restaurants in Ban Chan Krem where Marines and sailors frequently eat, warranting the food being served is prepared in a sanitary manner," said Sylvester. "I go around

the camp doing vector control operations, spraying

insecticide around the areas in which Marines and sailors conduct training and reside."

A successful Cobra Gold field training evolution means that everyone involved is able to get quality training, explained Capt. Brandon M. Stibb, Headquarters and Service Company commander.

"I have never met a preventative medicine tech. who is as thorough as Doc Sylvester," said Stibb. "We didn't have a single case of a Marine or Sailor being pulled from this important training exercise due to illness, and I think it is all thanks to his dedication."

According to Saldage and Stibb, the battalion's success during Cobra Gold can be attributed to Sylvester because without him the battalion would not be able to train at full strength.

Exercise Cobra Gold is the largest multinational exercise in the Asia-Pacific region and provides the Kingdom of Thailand, United States, Singapore, Japan, Republic of Korea, In-

donesia and Malaysia an opportunity to maintain relationships and enhance interoperability. The exercise includes humanitarian and civic assistance projects, a staff exercise and field training exercises. +

**Hospital Corpsman 2nd Class Harold D. Sylvester tests samples of water to ensure it is safe for drinking at Ban Chan Krem, Kingdom of Thailand, during exercise Cobra Gold 2013. Sylvester is a hospital corpsman and preventative medicine technician with Headquarters and Service Company, 1st Battalion, 3rd Marine Regiment, which is attached to 4th Marines, 3rd Marine Division, III Marine Expeditionary Force, as part of the Marine Corps' unit deployment program. U.S. involvement in Cobra Gold 13 demonstrates commitment to building military-to-military interoperability with participating nations and to supporting peace and stability in the region.**



# WOUNDED WARRIOR YOGA

Story and photo by Rebecca A. Perron | Naval Medical Center Portsmouth Public Affairs

The Exalted Warrior Adaptive Yoga program continues to provide an alternative therapy to the Marines of Wounded Warrior Battalion-East Portsmouth detachment as the program enters into its third year at Naval Medical Center Portsmouth.

The program was brought to the medical center by the Exalted Warrior Foundation. It gives injured Marines recuperating from post-traumatic stress disorder and traumatic brain injuries (as well as physical injuries), an option for healing through this comprehensive, complementary and alternative therapy.

Since the program's inception, Ann Richardson, yoga instructor and owner of Studio Bamboo in Virginia Beach, has come to NMCP to lead the Marines in a weekly class, offering them an opportunity to relax and reconnect with themselves. For many, it's learning to connect to their changed bodies.

"I had worked before with friends who had been injured and used yoga to help them get back into their bodies after the injury," Richardson said. "To help keep them focused on what they are trying to do, you have to adapt the yoga to them. That's why it's called adaptive yoga."

Richardson began working with service members after one of her clients, retired Rear Adm. Tom Steffens, began the Exalted Warrior Foundation. Steffens served as a SEAL for 30 years and found yoga relieved pain from injuries that surgery and medication had not provided. His experience led to the foundation's creation and the implementation of the program at four military and five veterans' hospitals around the country.

"Adaptive yoga increases breathing, concentration and focus, and a calmness comes over them," Steffens said. "After the first session, some say, 'This is the

first time I've been relaxed in several years.' It's hard to come down after all the training and deploying. For anyone who is injured or who has PTSD, dealing with this goes on for a lifetime."

The numbers in the detachment have fluctuated — up to 70 in 2011, now in the 40s — and Richardson has seen many new faces willing to give yoga a shot. But others are resistant to the idea that yoga can help them.

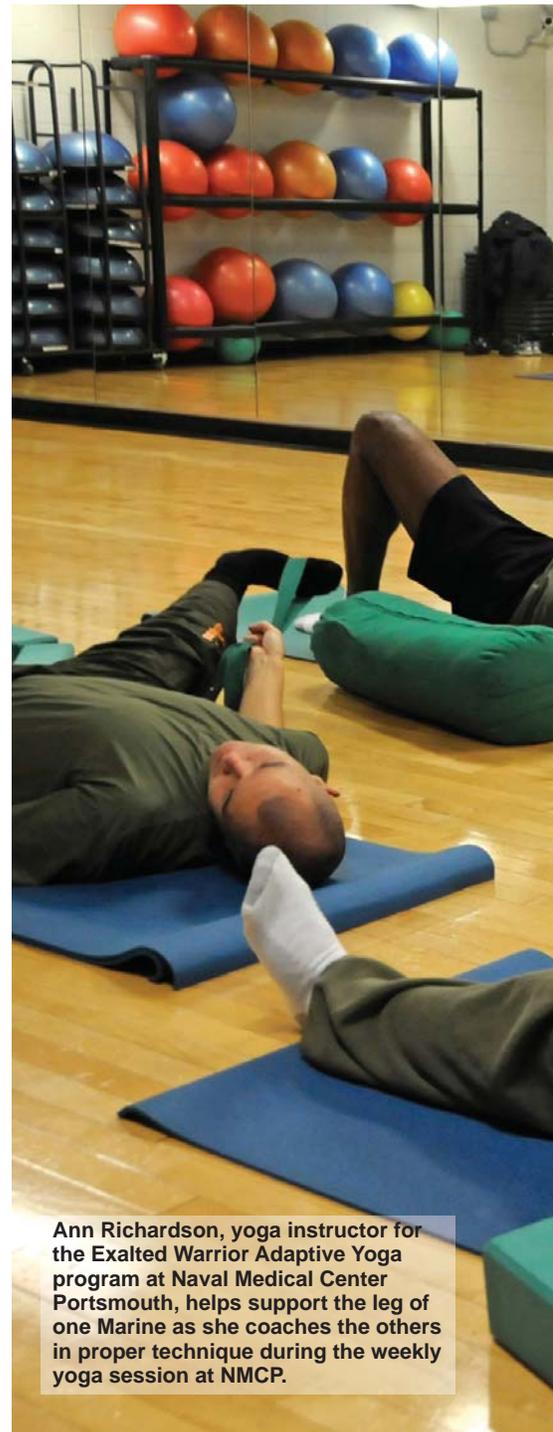
"I hear, 'I don't need yoga,' and I tell them to come in and give it a try, that they don't have to come back," Richardson said. "Oh, they come back. I see them smile through the pain, and then they get it. They understand that they get relief from it. It's not so jarring to their system; they find their own body and for those who are physically injured, find themselves in a new body."

During each session, Richardson works the room, helping the Marines get into the preferred position. Sometimes she holds a leg and foot or an arm and a shoulder in place, sometimes she helps align backs and hips. She frequently places bolsters or blocks under bent knees or injured limbs for extra comfort and support.

The Marines' medical care at NMCP often includes traditional physical therapy to help them heal and become stronger. The yoga class supports the care they are already receiving.

"Many of them have orthopedic issues — injuries or amputations — and balancing is a big deal," Richardson said. "I have to be quick to tell them a modification so they can participate in every aspect of the session, but a lot of times they figure out a modification for themselves."

Sgt. Allan Olson, who has been diagnosed with PTSD and is being evaluated for a TBI, has attended only a few ses-



Ann Richardson, yoga instructor for the Exalted Warrior Adaptive Yoga program at Naval Medical Center Portsmouth, helps support the leg of one Marine as she coaches the others in proper technique during the weekly yoga session at NMCP.

sions, but has already figured out how adaptive yoga can work for him.

"I've had anxiety, nightmares and don't sleep well, so the nap time at the end is my favorite part," Olson joked. "Actually, I want to get into meditation and yoga for the relaxation, so I get a good workout on my own for the hour before and then stretch and relax for the next hour. It's some of the best stretching and helps slow things down. It's great because it slows down my mind and my body and gives me a break."



Melissa Marshall, the detachment's deputy officer in charge, has seen for herself the effects the program has had on her Marines.

"I think it's a great program," Marshall said. "The Marines are generally reluctant to participate at first, but that soon changes when they see it doesn't fit their preconceived ideas of what yoga is. I have seen some really fabulous results for some of the past participants. The relaxation techniques are very beneficial to the overall morale of the guys here."

About 10 Marines are able to take part in each session. With doctor's appointments and administrative tasks to juggle, the number of participants can fluctuate anywhere from a handful to nearly two dozen.

Richardson and the Marines make it their mission to work hard to stretch and relax. They end each session with the same relaxation technique.

"Draw all awareness into you, from your toes to heels to calves," Richardson said, as they laid on the exercise

mats, eyes closed. "Take a deep breath and draw all awareness there. Draw all awareness from your calves to knees to thighs. Take a deep breath and draw all awareness there."

By the time they have worked up to the top, many of them have fallen asleep, and Richardson leaves them all to rest for about five minutes before she wakes them with a gentle voice. The group gets up, refreshed, ready to take on the next step in their journey of healing. +



Hospitalmen Katie Manuel and Adriana Miranda-Rodriguez make preparations to assist with the insertion of contraceptive implants for female enlisted recruits at the 4th Battalion Aid Station, Marine Corps Recruit Depot Parris Island. (Photos by Regena Kowitz)

# LONG TERM Family Planning

By Cmdr. Dixie Aune, Regena Kowitz, and Michael MacDonald | Naval Hospital Beaufort

**A**n unplanned pregnancy can significantly alter the course of any woman's life, but this is especially true for women serving in the military. When a female

Sailor or Marine has an unexpected pregnancy, the consequences could have a detrimental impact on both her career and the operational readiness of her unit when, after the 20th week of pregnancy, she has to vacate her assignment aboard

ship or as part of a deployed unit. But, with the right education and preparation, every active duty female can make sure that any pregnancy is a planned pregnancy.

One of the benefits of being an ac-



**Cmdr. Dixie Aune, women's health nurse practitioner at Naval Hospital Beaufort who oversees the Well Women's Clinic at the 4th Battalion Aid Station, Marine Corps Recruit Depot Parris Island, inserts a hormonal implant into the arm of a recruit. During the third week of training, female recruits receive comprehensive information about different forms of birth control and are given the option of choosing which method they would like.**

tive duty female is access to a wide array of birth control choices. And yet, according to Michael "Bob" MacDonald, manager of the Sexual Health and Responsibility Program (SHARP) at the Navy and Marine Corps Public Health Center, the rates of unplanned pregnancies among active duty Sailors and Marines, like their civilian counterparts, are much higher than the national objective and higher than women in other western nations.

"Education about contraception is one of the best tools we have to help prevent unplanned pregnancies," said Cmdr. Dixie Aune, women's health nurse practitioner at Naval Hospital Beaufort. Aune also oversees the Well Women's Clinic at the 4th Battalion Aid

Station (BAS), Marine Corps Recruit Depot (MCRD) Parris Island, the only place in the Marine Corps where enlisted female recruits are trained.

"One of the best places to begin educating active duty females about preventing unplanned pregnancies is at the beginning – while they are still in boot camp and still in a learning mode," said Aune.

Aune and her staff at the 4th BAS have developed a comprehensive sexual health education program. During the third week of training, all female recruits attend a women's health education session at the clinic where they are provided information on different forms of contraception, including long acting reversible contraception (LARC).

According to Aune, LARCs, which include intrauterine devices and contraceptive implants, are one of the most reliable methods available to active duty females for preventing unplanned pregnancies.

"LARC methods should be among the first choice of recommendations for most women," said Aune. "They offer top level effectiveness, high rates of satisfaction, and no need for daily adherence."

LARCs are over 99 percent effective, unlike short-acting reversible contraceptives (SARC) such as the pill, transdermal patch, or vaginal ring. SARCs offer less reliability with typical effective rates ranging from only 72 to 94 percent.

Hospitalman Kati Manuel, one of the



**Cmdr. Dixie Aune, women's health nurse practitioner at Naval Hospital Beaufort who oversees the Well Women's Clinic at the 4th Battalion Aid Station, Marine Corps Recruit Depot Parris Island, provides information about contraceptives to female recruits.**

Sailors who works at the 4th Battalion Aid Station (BAS), agrees about the importance of educating female recruits. "If we get them the education and the birth control of their choice while they are still fresh and new in basic training, we are making a huge impact on the outcome of their decisions in the future."

In addition to educating recruits about birth control, Manuel herself has chosen to use a contraceptive implant, a form of LARC, specifically for its long-acting effects.

"I ran into days where I completely forgot to take my pill, throwing off my cycle and any actual protection the pill offers," said Manuel, who has been using LARC for the past year.

"I am rather new to the Navy and want to focus one hundred percent on

my job and my mission," Manuel said.

On training day 57, the recruits who decided earlier to get the LARC return to the clinic to have the implant placed. Before the procedure, the recruits are given detailed information about the specific hormonal implant they will receive, educated on potential side-effects, and offered an opportunity to ask questions, either as part of the group or one-on-one with a health care provider.

According to Aune, the recruits and active duty females she sees in clinic want to make the right decisions when it comes to family planning. "We, their health care providers, have to provide them with the tools to do so – the education and access to the contraceptive of their choice."

Pfc. Qunesha Patrick, an active duty Marine currently stationed at MCRD

Parris Island, decided that a LARC was the right choice of birth control for her while still a recruit at 4th Battalion last year. After trying several different forms of birth control, including the pill and the patch before arriving at boot camp, she decided that a more long-term solution would provide the best protection. Her choice, like Manuel, was a hormonal implant, a single rod containing etonogestrel that is placed under the skin of the upper arm and is effective for three years.

"I know I want kids, but right now isn't a good time with me being new to the Marine Corps," said Patrick. "I need time to think about my career and focus on getting promoted."

In addition to educating recruits, MacDonald believes it's also important to educate the female Sailors and Ma-

“Military service and motherhood are enjoyable and completely compatible when adequately planned.”

- Cmdr. Dixie Aune



Cmdr. Dixie Aune provides information about contraceptives to female recruits. While at MCRD Parris Island, the only place in the Marine Corps where enlisted female Marines are trained, all female recruits receive comprehensive information about women’s sexual health and different birth control options.

rines who have moved past boot camp as well as Navy health care professionals about the benefits of LARCs while dispelling myths.

“The principle challenge to increasing LARC use may be a gap in information,” said MacDonald. “There are still some myths about the safety of IUDs and a lack of information about the easy availability of IUDs that may prevent some women from even asking their doctor about them. Making sure our female service members and Navy health care professionals more fully understand 21st century LARCs may increase their usage and reduce the incidence of unplanned pregnancies.”

Aune agrees that it’s important to address the misconceptions that health care providers may have about LARC use that may serve as a barrier to access.

“In actuality, complications of IUD’s and the contraceptive implants are rare,” said Aune. “LARC use has proven not only to be very reliable at preventing unplanned pregnancies, but also more cost effective than traditional choices. Despite this, many patients continue to be offered more traditional methods such as birth control pills, which are user dependent and far less reliable.”

According to MacDonald, the American College of Obstetricians and Gynecologists (ACOG) recently published

information stating that LARC devices are among the most effective methods of reversible contraceptives and one of the best methods for reducing the rates of unintended pregnancies.

“Military service and motherhood are enjoyable and completely compatible when adequately planned,” said Aune, who has served on active duty for 23 years and is herself the mother of three. “We, as Navy health care providers, just need to make sure we do our part by providing the information and resources to help our active duty females make the family planning choices that are best for them, right for their career, and support mission readiness.”+



Cmdr. Anthony Beers, a family nurse practitioner with Naval Hospital Pensacola's Family Medicine Blue Team, checks a patient's throat during an appointment. NHP's Family Medicine and Internal Medicine clinics utilize a team approach so patients will be familiar with the staff providing their health care.

Naval Hospital Pensacola offers same day appointments through

# Medical Home Port

Story and photos by Mass Communication Specialist 1st Class James Stenberg | Naval Hospital Pensacola Public Affairs

A common misconception when it comes to health care is the wait associated with making appointments. That is not the case with the Medical Home Port program at Naval Hospital Pensacola, Fla., where same day appointments and patients seeing their assigned provider are top priorities.

Medical Home Port is a team-based approach to primary health care where

patients are assigned to a specific Medical Home Port Team.

The team reviews all of the patient's medical needs and ensures that anything required for the patient is addressed during the appointment, including booking referrals and giving missing immunizations.

"Medical Home Port is an integrated approach to delivering health care to the patient," said Ken Laube, Medical Home Port business manager with NHP. "It provides a wider scope of services in

clinics for the patient."

Along with doctors, nurses and Navy corpsmen, the team approach involves other specialists within each clinic, such as a pharmacist who can dispense some medications, a case manager, diabetic specialist and a behavioral health specialist (motivational coach) to help with chronic habits such as insomnia, smoking or weight loss.

To qualify as a Medical Home Port, a hospital must be certified by the National Committee for Quality Assurance.



Hospitalman Henry Molina, a corpsman with Naval Hospital Pensacola, checks the blood pressure of Karen Kearney during her appointment with Family Medicine. NHP's Family Medicine and Internal Medicine clinics utilize a team approach so patients will be familiar with the staff providing their health care.

NHP is a leader in the DoD with 10 recognized Medical Home Port Teams: Family Practice, Internal Medicine and Pediatrics at NHP and Naval Branch Health Clinics Gulfport, Miss.; Meridian, Miss.; Millington, Tenn.; Belle Chasse, La.; Whiting Field, Fla.; Naval Air Station Pensacola, Fla.; and Naval Air Technical Training Center, Pensacola, Fla. Among the requirements for certification are the ability for patients to contact their team 24 hours a day, seven days a week and the team's availability to handle same day appointments.

Many people think it is easier to be seen by going to the emergency room, but this is not always the case.

"What we [Internal Medicine] are seeing is that 40 to 50 percent of common conditions that we can manage are showing up in the emergency room at times we are open," said Cmdr. Carolyn Rice, department head, Internal Medicine, NHP. "Conditions like ear ache, cold, flu and back ache ... these are common issues that you would normally see your doctor for."

If patients have an emergency, then the emergency room is the appropriate place to go. However, if patients want to be seen the same day, and it's not an emergency, the Medical Home Port is

the ideal location. Not only can patients eliminate the waiting in the ER, which can be hours, they will have the advantage of seeing their own medical team.

"Getting to see your regular doctor has numerous advantages; they already have familiarity with your medical history, your conditions and your personal concerns when approaching your health care," said Rice.

Having that continuity between patients and primary care managers is an important component of Medical Home Port.

"What's very unique about [Medical Home Port] are the efforts to maintain continuity between patients and their own doctors," said Laube. "The more [patients] see their doctor versus another doctor ... their [frequency of] visits go down, satisfaction goes up for both the patient and the doctor, and the quality of the visit is better because you are going to someone that knows your history."

During the month of January, NHP's three primary care medical homes: Internal Medicine, Pediatrics and Family Medicine all scored within the top 25 of patient and primary care manager continuity across the entire DoD, with Internal Medicine coming in first with

90.1 percent.

"What that means is that 90 percent of the time when you come for an appointment, you will be seeing your regular doctor," said Rice. "Even when you are unable to see your doctor, you will still be seeing a member of your team."

Actual Medical Home Port visits are not the only way patients can receive health care or information pertaining to their health.

Patients also have access to online tools through TRICARE online such as making appointments, accessing personal health data, requesting prescription refills or communicating with their provider and Medical Home Port Team through secure messaging. Patients can ask their team questions regarding their health while still maintaining patient confidentiality and possibly saving a trip to the hospital.

With the overall goal of patient satisfaction, Medical Home Port aims to improve the patient's health care experience while also increasing access to care. This approach makes health care easier and more convenient than ever for patients.

To make an appointment with a Medical Home Port Team, contact your team directly or call the appointment line at (850)505-7171.+



Naval Medical Center San Diego registered dietician, Carly Hill poses for a photo with three-year-old pediatric inpatient Shadrach Smith. (Photo by Mass Communication Specialist 2nd Class Jessica L. Tounzen)

# SURVIVOR

By Paul R. Ross | U.S. Navy Bureau of Medicine and Surgery Public Affairs

**T**he word “cancer” is ugly. It takes lives, devastates families and destroys people from the inside. It’s a word no one wants to hear come from a doctor’s mouth. But when the unsightly word is paired with another three-syllable sound, it becomes a label of hope, perseverance and optimism.

Twelve years after a dietician at Naval Medical Center San Diego received a life-altering diagnosis at the age of 15, she continues to bear the hard-earned

label that combines the two contrasting words. She is a cancer survivor.

When Carly Hill was 15 she was an avid basketball player. But soon she became sluggish on the court of her summer-league team. She wasn’t recovering at a normal pace. After various medical tests and visits to her physician she was diagnosed with Acute lymphoblastic leukemia (ALL) — a disease that helped shape her devotion to helping others and her unique perspective on life.

“The first thing that came to my mind as I talked to my primary care doctor was, ‘Am I going to lose my hair?’” Carly said. “I was an adolescent

and just wanted to be normal. Secondly, I asked, ‘Am I going to die?’”

Receiving the life-altering diagnosis was Hill’s first step in her battle against the debilitating disease. Soon a flurry of medical tests and procedures made the young girl feel far from a normal high school sophomore.

“As a teenager, I was going through these intense chemo-therapy treatments,” said the Yountville, Calif. native. “I couldn’t play basketball anymore and that was really heartbreaking. Your blood cell counts are down and you don’t have a lot of energy. I chose not to go to school because there is risk



**“I was put here, and kept here, for a reason. I feel like that is why — to help.”**

**-Carly Hill, Naval Medical Center San Diego dietician**

**Registered dietician Carly Hill listens to Marine Sgt. Jessica M. Salgado’s dietary concerns during her visit to Naval Medical Center San Diego’s (NMCS) nutrition clinic. (Photo by Mass Communication Specialist 2nd Class Jessica L. Tounzen)**

of infection. You really don’t feel very normal.”

Carly’s brother, who is three years older, remembers his sister’s unwillingness to let the disease get the best of her.

“It was extremely difficult for me to watch her go through the process, and be in so much pain,” said Ryan Hill. “She and my Dad are very similar in the way they handle difficult situations. They generally remain calm and quiet, and don’t express many feelings or emotions. Carly never said the words, ‘why me’ or ‘I can’t do this anymore.’ She was a true warrior, and inspiration to our family.”

Her doctor let her know that her chance of survival was 75-95 percent, but that she would have to undergo chemo-therapy.

“I was put on a randomized study,” Carly said. “My parents were the ones who made that choice. They kind of talked to me about it, but truly I couldn’t really understand. I was randomized to help other researchers to determine what is the best chemo-therapy

for at-risk ALL patients. From there I was on the standard dose. They put me on a road map of medications for about two and a half years.”

Shortly after her first round of treatments, the family received good news.

“I ended up being an early fast responder, which is a really good sign to the chemo-therapy, meaning that they couldn’t find a lot of the cells in my body that were cancerous after the first dose,” Carly said.

But the various treatments soon led to other problems.

“After my cancer treatments, I developed a condition from steroids, called avascular necrosis,” Carly said. “Somehow the steroids cut off the blood supply to the bone tissues in my joint areas, especially my hip areas. My hips actually broke and about 10 years ago and I had to get a hip replacement.”

On top of having her hips replaced at the age of 18, the former basketball player also dealt with other issues brought on by the chemo-therapy.

“Research shows that children that

have undergone chemo-therapy are incredibly depressed and anxious,” Carly said. “That was something I really struggled with after my therapy. I had trouble really getting out of that shy sense and striving for normalcy.”

Through her depression she eventually found her way to her true passion.

“Carly battled an eating disorder shortly after entering remission from cancer, and she wanted to control everything — especially when it came to her weight,” Ryan said. “Through her journey in overcoming a nasty eating disorder, blossomed a love for advocating a healthy lifestyle.”

Carly originally wanted to be a teacher. She moved to San Diego for school but soon found herself switching degree programs.

“When I was about 20, I was getting help from a registered dietician as well as a therapist,” Carly said. “I really noticed how much it helped me. And I learned to change the thoughts about myself and learn to love myself unconditionally. But it took time working with the



Naval Medical Center San Diego registered dietician Carly Hill is featured on a banner in New York City's Times Square in honor of Registered Dietitian Day Mar. 13 in recognition of her personal testimony to the Academy of Nutrition and Dietetics. (Photo courtesy of Carly Hill)

therapist and dietician. It struck a light bulb in my head of wanting to become a dietician. It was ultimately my neighbor sitting me down and saying, 'You know what, you should get into nutrition, why don't you teach nutrition.'"

She was already at San Diego State and switched my major. She received a degree in nutrition and performed her dietetic internship with the University of Delaware distance program.

Being a childhood cancer survivor, Carly wanted to give back to that population.

"I'm getting ready to become a board certified pediatric specialist and have all the resources at my fingertips within our nutritional clinic here," Carly said. "I wanted to be able to learn more in pediatrics because there's so much to know.

Little guys are so different than actual adults to even the elderly. We're working with a population from zero to 20 years old. Every age group needs different nutrients."

As a dietician, Carly believes she plays a vital role in the health of her patients.

"We are really investigators of the patient," Hill said. "We look at everything from their lab tests to their socio-economics of where they can get food. All these different pieces are the big picture in trying to help them with what we can do right now if they're inpatient. Is the diet appropriate for their needs? All of this can lead to death if nutrition isn't adequate."

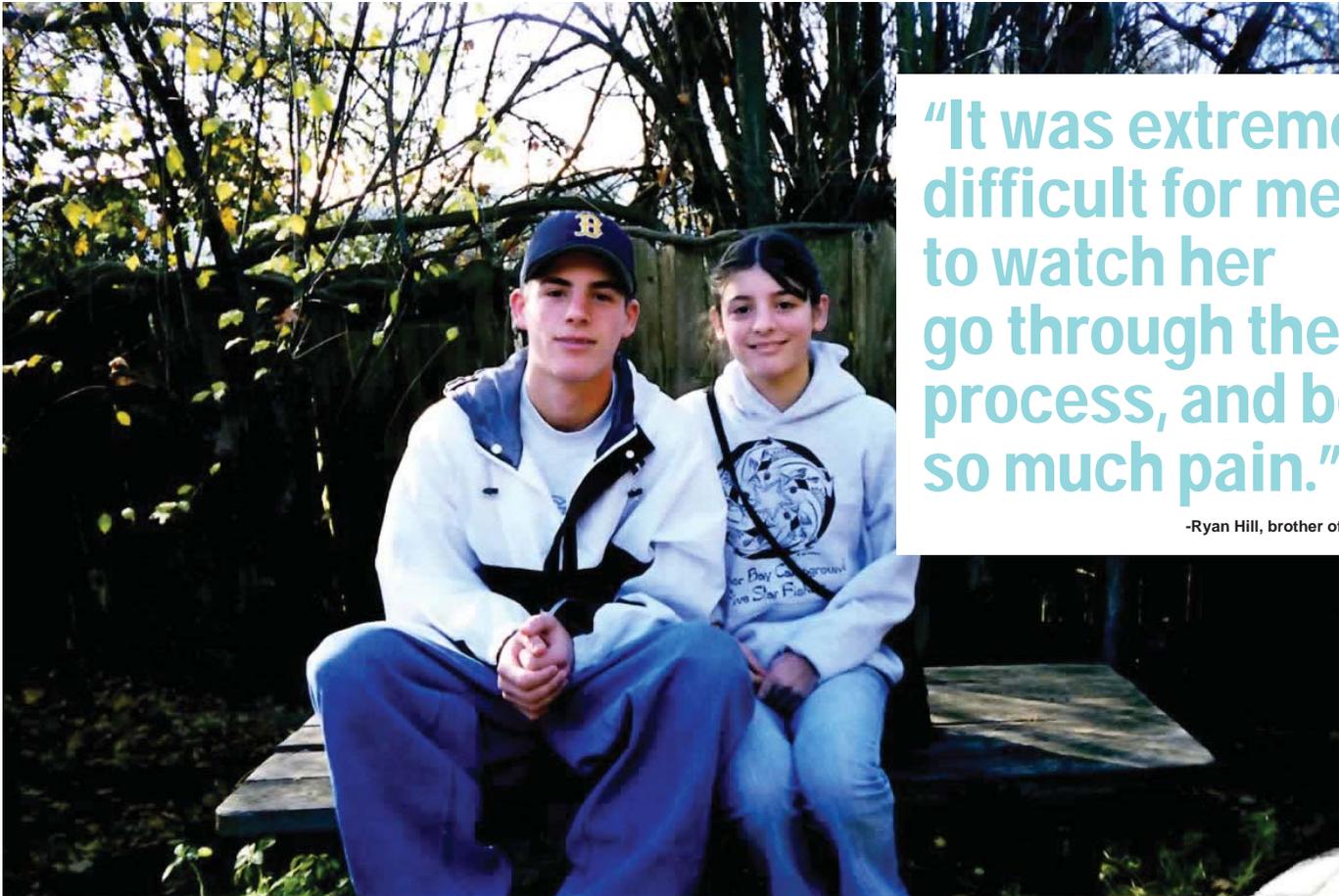
Along with working in pediatrics, Carly also serves an older population

through a weight loss class and a Cancer 101 class offered at the medical center.

"I can really relate to the population even though it is adults," Carly said. "It's really refreshing (for the patients) to have someone sit down with you and say that there is hope, I've been in your situation. Maybe you've received different therapies but I want to let you know my experiences. Not everyone's experiences are the same but here's the latest research, the latest tools and tips to get through the hard times with your nutrition."

Carly's personality and passion are the reason she is able to provide her unique brand of care to her patients.

"Carly loves learning," said Charis Ross, Naval Medical Center San Diego pediatric dietician. "She loves what



**“It was extremely difficult for me to watch her go through the process, and be in so much pain.”**

**-Ryan Hill, brother of Carly Hill**

**Carly Hill sits with her brother, Ryan Hill, for a family picture. The photo was taken about two years before Carly was diagnosed with Acute Lymphoblastic Leukemia. (Photo courtesy of Carly Hill)**

she does. She is bubbly and is always happy.”

Her dedication to her patients led to her recently being recognized by the Academy of Nutrition and Dietetics for a personal testimony she submitted, revealing the highlight of her five months spent at NMCSD — helping save the life of a young pediatric patient who had leukemia by using medical nutrition therapy and food as medicine.

“This was incredibly meaningful to me because I could relate to my patient,” Carly said. “As an adolescent, I conquered the same type of cancer, becoming a now 12-year survivor. My relatability and nutritional expertise not only gave my patient a sense of hope and support, but my nutritional tools and coaching helped the patient overcome long-term nutritional complications after intensive treatments.”

Her role as a dietician is to give her patients the ability to manage their own

nutrition.

“I want people to see that they can change their lifestyle,” Carly said. “They need the correct tools and support in order to do it, but ultimately they have to be the ones who can make those changes. I can’t do it for them, I can only be their cheerleader.”

Along with her patients, Carly’s other passion in life is her family’s winery, which is located in the Napa Valley in California. Her inspirational story can even be found on the label of one of the winery’s chardonnays.

“My dad, my mom, my brother and I, are all proprietors of my families wine,” Carly said. “Because I ended up surviving and continue to be a survivor, my brother actually named one of our Chardonnays after me. It’s my survivorship wine. It’s called, ‘Carly’s Cuvee Chardonnay,’ because I’d overcome all these different obstacles. Even when I’m in the wine tasting room, a parent will

come up to me and say that ‘Carly’s Cuvee’ is incredible because my daughter is a cancer survivor too.”

Carly’s brother believes that overcoming cancer helped shape his sister into who she is today.

“Before Carly was diagnosed with cancer, she was a bit more reserved, risk adverse, and less outgoing than she is today,” Ryan said. “I firmly believe that Carly gained more confidence and motivation by winning the battle against cancer.”

The dietician believes she won the battle against the disease for a reason.

“The reason I wanted to become a dietician is to help people and give back,” Carly said. “I was put here, and kept here, for a reason. I feel like that is why — to help.”

At 12 years from being diagnosed with leukemia, no cancer can be found in Carly’s body. She has never had a relapse. She is a survivor. +

# SEARCH RESCUE

Story and photos by Cpl. Andrea Cleopatra Dickerson | 2nd Marine Aircraft Wing & Marine Corps Air Station Cherry Point



Marines from VMR-1 show one of their beloved HH-46D Sea Knights affectionately referred to as “Pedro” to a television news crew from a local station. The news crew came to visit the squadron after the Marines and Sailor aboard the aircraft rescued three children from the Croatan National Forest.

**I**t was Presidents Day, and Hospital Corpsman 3rd Class John H. Nelson had the day off from work. When he left his house in New Bern, the hospital corpsman with Marine Transport Squadron 1, had no idea how his day would unfold.

“When I got the call that we were needed to assist a search and rescue mission, I was about to take my dog for a walk,” he said.

Late in the afternoon, local authorities reached out to the search and rescue

squadron to help recover three missing children who wandered too far while playing in the Croatan National Forest.

After getting the call, six crewmembers from VMR-1 rushed to the squadron’s hangar to board one of their beloved HH-46E Sea Knights affectionately referred to as “Pedro.”

For most of the crew, this was the first time they carried out a real-world search and rescue mission. This was also the first mission carried out under the squadron’s new commanding officer who took charge of the “Roadrunners” just three days before the incident.

“It made me extremely happy to be able to return the kids to their parents and make their mother happy,” said Lt. Col. Brian D. Bernth. “As a parent with three kids around the same age, I can only imagine what those parents were feeling. I’m glad these highly-trained

Marines were able to bring the children to safety.”

After authorities discovered the children’s whereabouts, Pedro was directed to a secluded deer stand the children were using for cover.

“When we arrived on the scene, the children were waving their arms to flag us down,” said Nelson.

The crew realized after arriving that they did not have enough space to land the aircraft to retrieve the children. They knew the only way to get on the ground was to send crewmembers down to help the children board the helicopter.

“This is the perfect scenario for us,” said pilot Maj. Bryan E. Donovan, who was navigating Pedro at the time. “We train hard for instances like this where there was lots of scrub brush and nowhere to land.”

Nelson and rescue swimmer Cpl.



Rescue swimmer Cpl. Chad V. D'Ambrogi and Navy Hospital Corpsman 3rd Class John H. Nelson, both with Marine Transport Squadron 1, were among crew members who rescued three missing children from the Croatan National Forest Feb. 18. After getting a call to support a search and rescue mission, six crew members from VMR-1 rushed to the squadron's hangar to board one of their beloved HH-46 Sea Knights affectionately referred to as "Pedro."

Chad V. D'Ambrogi rappelled out the aircraft to the ground where they were able to fit all three children in a search and rescue basket and hoist them up to the cabin of the aircraft.

"At first, I was in disbelief that this was actually happening," said Nelson. "Our reactions were sheer muscle memory. Even though we mainly perform hospital transfers, situations like this are what we train the most for."

D'Ambrogi noticed one of the boys was missing a shoe. He said the other children gave him their socks to put on his foot to help combat the dropping temperature of the already chilly day.

"Once we had the children inside, we turned the heat all the way up and wrapped them in blankets," said Donovan.

The children were transported to a field just a few miles from where they

**"Our reactions were sheer muscle memory."**

- Hospital Corpsman 3rd Class John H. Nelson

were rescued. Newport Fire and Rescue and other local emergency response teams and authorities were on scene waiting when they arrived.

Nelson said the children thanked the Marines and Sailor aboard Pedro for their efforts. He smiled as he said that it made him feel good to help out and give

back to the community.

"A lot of time, effort and training is put forth by all the Marines and Sailors in VMR-1," said Bernth. "Hard work goes into keeping our aircraft and Marines ready to respond to incidents. It amazes me how good they are at doing their jobs."+

# Tactical Combat Casualty Care

Story and photos by Marine Cpl. Timothy Norris | Marine Corps Forces Africa



**Sergeant Balec Nelson, a Special-Purpose Marine Air-Ground Task Force Africa 13 radio operator from Kailua, Hawaii, and Lieutenant Commander Jonathan McComb, Naval Criminal Investigative Service, treat a simulated bullet wound during the final exam of the Tactical Combat Casualty Care course. The TCCC course teaches basic first-responder skills and helps service members prioritize casualty care in combat situations to maximize safety and effective care.**

NAVAL AIR STATION SIGONELLA, Italy – Marines with Special-Purpose Marine Air-Ground Task Force Africa 13 completed the Tactical Combat Casualty Care course March 14.

The Marines completed the week-long course in preparation for military-to-military engagements with African partners.

“It’s used primarily as a training tool and guideline when we do first-responder care in a combat environment,” said Navy Hospital Corpsman 1st Class Eric Ancheta, a SP-MAGTF Africa 13 corpsman and instructor for the course.

The TCCC program became part of the Defense Health Board in 2001 to improve the principles of good trauma care in combat situations. The guidelines are updated every four years.

“The last time I attended a TCCC course was two years ago, so a refresher was due,” said Sgt. Brian Hutchinson, SP-MAGTF Africa 13 motor transportation chief from Eureka, Calif. “It’s good to learn what is current and recommended now, as opposed to two years ago.”

The three main goals of TCCC are treating the casualty, preventing further injuries and accomplishing the mission. The course teaches how

to perform basic lifesaving skills, but also when to use those skills. Three phases of care are identified to help prioritize what care to give and how to maximize safety.

Phase one, care under fire, is when service members are under fire in an open area without cover.

“The first intervention that we teach in care under fire is not medical at all: shoot back or suppress the enemy,” said Ancheta, a Whittier, Calif., native. “By doing that you are preventing further harm to the casualty.”

Tactical field care, phase two, is when airway management, minor bleeding, intravenous access, treatment for shock and other care are possible and safe.

Phase three, tactical evacuation care, is where the same injuries are treated as tactical field care but in preparation to be evacuated to a medical center.

“Everything we do is about muscle memory,” Ancheta said. “Training to perform casualty care this way helps you to focus on the mission at hand, so you’re still in a tactical mindset.”

At the end of the training is a final exam where

Sgt. Brian Hutchinson, Special-Purpose Marine Air-Ground Task Force Africa 13 motor transportation chief from Eureka, Calif., simulates providing security during the final exam of the Tactical Combat Casualty Care course.



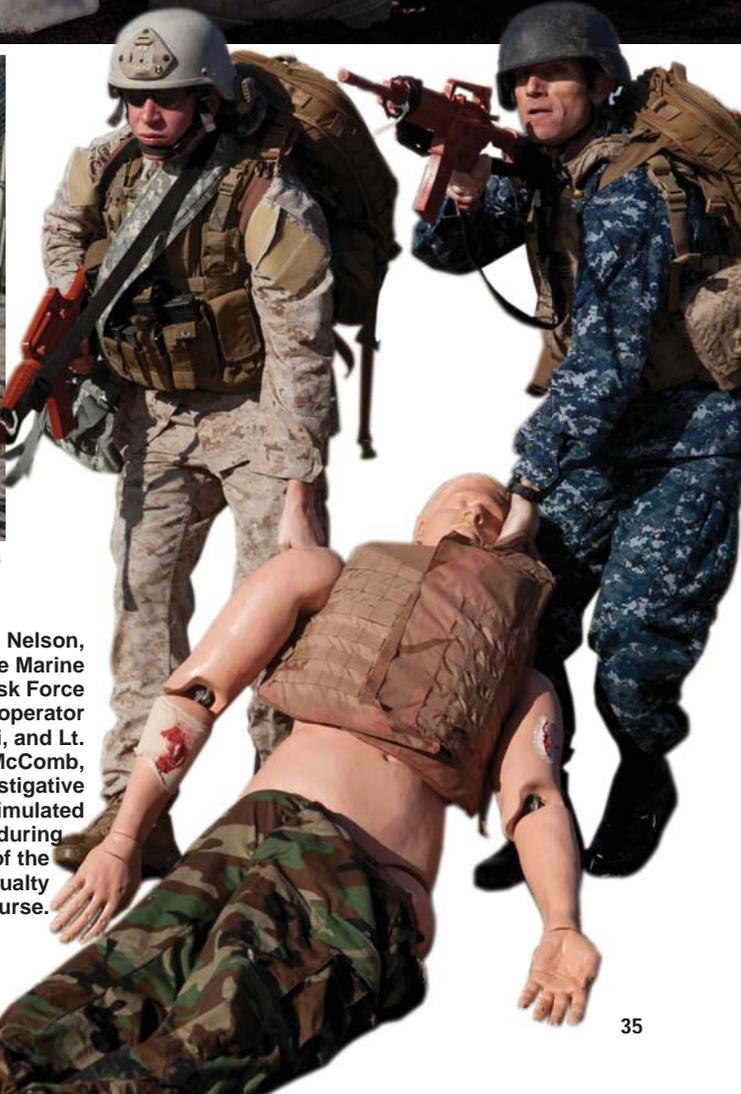
Sgt. Brian Hutchinson, Special-Purpose Marine Air-Ground Task Force Africa 13 motor transportation chief, provides security during the final exam of the Tactical Combat Casualty Care course.

the process and techniques are tested in a simulated combat environment.

After Hutchinson's simulated casualties were properly treated and evacuated, he became TCCC certified.

"I feel more comfortable with myself having been through the course as a refresher," said Hutchinson. "I want to be able to help in a combat situation, so I can be sure that my brother or sister makes it back home."+

RIGHT - Sgt. Balec Nelson, a Special-Purpose Marine Air-Ground Task Force Africa 13 radio operator from Kailua, Hawaii, and Lt. Cmdr. Jonathan McComb, Naval Criminal Investigative Service, drag a simulated casualty to safety during the final exam of the Tactical Combat Casualty Care course.



# Navy Health



# Regent's Early Career Health Care Executive Award

Story and photo by Jennifer Zingalie | U.S. Naval Hospital Guam Public Affairs

It is not unusual for a health care professional to wake early, which is exactly what Lt. Cmdr. Daren Verlhulst, senior health facility planning and project officer (HF-PPO) for U.S. Naval Hospital Guam did on March 14.

His 3 a.m. wake-up call was so that he could participate in the first ever virtual Rear Admiral Lewis E. Angelo Navy Symposium (LEAPS).

Verlhulst is this year's recipient of the Navy Regent's Early Career Health Care Executive Award of the American College of Healthcare Executives (ACHE). The award

recognizes affiliates who have significantly contributed to health care management. Recipients are evaluated on such criteria as leadership, innovative and creative management, executive capability, and participation in health association activities and civic/community activities.

"Continuous professional development is a hallmark of success in the Navy Medicine Enterprise," said Capt. Jeff Plummer, U.S. Naval Hospital (USNH) Guam commanding officer. "Witnessing both his dedication to his work and leadership as a health care executive made it easy to author his nomination."

Verlhulst is part of a Navy Bureau of Medicine and Surgery (BUMED) detachment in Guam along with two other team members. He is the on-site representative providing strategic oversight for the \$159 million USNH Guam project currently being conducted. He is also serving as the Navy Medicine action officer for all Navy Medicine military construction projects in support of the Defense Posture Realignment Initiative actions for Guam.

"To be a part of the planning and design and then execution of a project is a unique opportunity," said Verlhulst. He also added that he looks forward to walking through the hospital once it is completed and is caring for patients.

Verlhulst's oversight includes equipment development, design reviews and project management. He collaborates with the Naval Facility Engineering

Command and the Army Corps of Engineers, which provides valuable insight when making decisions regarding validation of equipment specifications and contract requirements. This played a significant role in the award of a \$35 million Initial Outfitting and Transition Services and Commodity contract for USNH Guam.

Throughout the project, Verlhulst has met changes and challenges.

"Here as a detachment we have to influence a lot of different entities and work to keep our customers [the hospital staff] focused on the goal," said Verlhulst. "Any time there is a change we have to go back and decide how to implement that change without affecting the mission of the hospital."

During his time here he has been active with the ACHE Guam Local Program Council and served as their 2012 President. He also helped initiate several educational and networking events. His goal for the local program is to work to provide training opportunities that will allow health care professionals on Guam to earn Continuing Education Units (CEU).

Also a leader in his home, his son has decided to join the Navy as a hospital corpsman. In fact, the Verlhulst name will forever be on the pages of the new hospital's history books. He will perform his son's oath of enlistment at the new hospital making him the first corpsman to take their oath of enlistment in the new hospital facility. +

Detached to U.S. Naval Hospital (USNH) Guam, Lt. Cmdr. Daren Verlhulst, Navy Bureau of Medicine and Surgery, stands in front of the construction of a new hospital. Verlhulst is serving as the senior health facility planning and project officer and was recently selected as the recipient of the Navy Regent's Early Career Health Care Executive Award of the American College of Healthcare Executives.

# KSG MEDICAL

Story and photos by Mass Communication Specialist 3rd Class Karen Blankenship | USS Kearsarge (LHD 3) Public Affairs



Lance Cpl. Daniel Flaherty has his teeth examined in the dental department aboard the amphibious assault ship USS Kearsarge (LHD 3).

**B**efore this deployment, I'd only visited the medical department aboard a ship once, after I was stung by a bee in Guam. During this deployment, we've all had to make a trip to medical at some point, if for no other reason than to receive a vaccination. I know that when I think of the medical department, I imagine lines of sailors and Marines waiting to receive cold medicine or going in for their yearly medical or dental check ups, but the medical department aboard Kearsarge is capable of so much more.

I was surprised to find out that, outside of USNS Comfort and Mercy, Kearsarge and other Wasps Class LHDs are the largest casualty receiving and treatment ships and have the most medical

capability in the Navy.

"As an amphibious ship, we carry Marines to areas of the world where medical facilities are not as available," said Cmdr. Harold Laroche, senior medical officer aboard Kearsarge. "It is vital for a ship of this crew size to have its own fully staffed medical treatment capability. When we are out in the middle of the ocean half a world away from home, there is often times no one else to rely upon. We are on our own and must be a self-sustaining operation."

Kearsarge can do just that. The medical department has four operating rooms, four exam rooms, a clinical lab, blood bank, a 15-bed intensive care unit (ICU), a 46-bed general ward, radiology services, a pharmacy, a psychiatrist and, when needed, 598 beds. Kearsarge also has a full dental department, led by Cmdr. Trent Outhouse, that offers full general dentistry services as well as prosthetic, endodontic and surgical services.

But that's just the beginning.

"With the FST (fleet surgical team) on board, in addition to our primary care responsibilities, we now have the surgical capability that allows us to do so much more from a medical standpoint," said Laroche. "What the FST does is extend our capabilities such that now we can not only see routine patients, but we can also take on surgical cases. When the FST is on board, we are really a full-fledged mini hospital."

FST is a small unit, only 17 people, but it brings with it the ability to perform surgery aboard the ship. According to Hospital Corpsman 1st Class Tamecca Williams, a respiratory therapist with FST, their surgeon has already performed two minor surgeries since we've been underway.

Kearsarge is the command, or parent, ship to FST, which also deploys on other LHDs and currently has staff aboard San Antonio and Carter Hall.



**Hospital Corpsman 2nd Class Lilibeth Hunton checks Aviation Boatswain's Mate (Handling) Airman Ignacio Gutierrez's temperature aboard the amphibious assault ship USS Kearsarge (LHD 3).**

"We have to depend on each other because we're so small," said Williams. "We bounce around from ship to ship and travel as a unit. We work very close together and we have a good working relationship."

FST also brought a psychiatrist along for the deployment for the first time.

"Deploying mental health professionals on LHDs is something that has been being evaluated over the last few years," said Lt. Jason Delinsky, Kearsarge's medical administration officer. "As a result, USS Iwo Jima deployed with a psychologist or social worker last year, and we are fortunate enough to have Lt. Cmdr. Williams, a psychiatrist, deploy with us this year. The hope is that instead of MedEvac-ing mental health patients, we will be able to treat the patient and keep them on board."

In addition to the FST, the 26th Marine Expeditionary Unit, which is embarked aboard Kearsarge, also brings with it five medical officers, two emergency room physicians, one critical care nurse, four independent duty corpsmen and more than 100 fleet Marine force corpsmen.

"Our jobs in the MEU's medical sec-

tions are to manage any injured patients who are ashore and bring them to the ship to Kearsarge staff or to the FST," said Senior Chief Hospital Corpsman Marvin Kitchens from the 26th MEU command element. "We have a very small role when it comes to day to day underway medicine except managing our (Marines) sick call and mission needs."

Should a major casualty happen, Kitchens said that the staff from the MEU is more than ready to help, but their main mission is to accompany the Marines to shore so that they can act quickly should a medical emergency arise.

"The Marine Corps has no medical assets," said Kitchens. "Navy medical personnel are trained in Marine Corps doctrine and battlefield medicine to prepare for our roles when assigned to any Marine Corps unit. Our unique ability is to function side by side with our Marine Corps brothers and sisters in any environment, manage their injuries and provide expedient evacuation via ground, air or by water, back to an echelon of care where physicians are standing by to provide advanced life saving

techniques. When put together with the FST and Kearsarge medical, there just isn't a better team in place in the world for what we do."

With so many different units coming together, one can almost assume that there would be some friction or an adjustment period, but everyone I talked to said that was not the case.

"We are all in medical so we look at each other as peers," said Hospital Corpsman 1st Class Courtney King, a corpsman with FST. "There's no separation."

As I walked around medical and talked to people in different areas such as the lab, the pharmacy, sick call and dental, the sense of camaraderie was immediately evident throughout the entire department.

"I think the corpsmen are very unique," said Laroche. "As the SMO, I am very fortunate to have a variety of individuals working for me and that makes my life easier. The corpsmen are very knowledgeable, and they like what they are doing. When you have this combination, I think that's a combination for success. So far I've been very blessed to have them on board with us."+

# NAVY MEDICINE CONTINUES FIGHT AGAINST AIDS

By Paul R. Ross | U.S. Navy Bureau of Medicine and Surgery Public Affairs



Ellyn Alcantara, RN, Naval Medical Center San Diego teaches Ethiopian National Defense Force blood collection procedures. (Photos courtesy of Cmdr. Roland L. Fahie)

According to the Joint United Nations Programme on HIV/AIDS, more than 34 million people around the globe now live with these diseases.

Navy Medicine, along with its DoD counterparts, continues to fight these ailments through the DoD HIV/AIDS Prevention Program (DHAPP) and the U.S. President's Emergency Plan for Aids Relief (PEPFAR).

"DHAPP has been responsible for assisting foreign military partners with their HIV/AIDS prevention, care, and treatment programs since 2001," said Dr. Richard Shaffer, executive director, DoD HIV/AIDS Prevention Program.

The DoD, through

DHAPP, is also an implementing agency for PEPFAR. PEPFAR, launched in 2003, is the United States' commitment to fighting the global HIV/AIDS pandemic and is the largest U.S. Government global health initiative dedicated to a single disease.

The DoD HIV/AIDS Prevention Program (DHAPP) is operated according to DoDD 6485.02E and is currently supporting HIV prevention, care and treatment, and strategic information programs in militaries in 66 countries worldwide.

The majority of DHAPP support is provided to militaries on the continent of Africa, reflecting the relative impact of HIV globally; however, assistance is provided to countries in areas of responsibility of all Geographic Combatant

Commanders.

The goals of DHAPP include: Assist in developing and implementing culturally focused, military-specific HIV programs; Integrate with other U.S. Government, allied governments, and organizations dedicated to HIV/AIDS prevention, care, and treatment; and Establish HIV/AIDS as a standard Security Cooperation Activity.

DHAPP employs an integrated bilateral and regional strategy for HIV/AIDS cooperation and security assistance. Using country priorities set by the U.S. Under Secretary of Defense for Policy and by the Office of the Global AIDS Coordinator, DHAPP implements bilateral and regional strategies in coordination with respective Combatant Commands

and PEPFAR Country Teams to offer military-to-military HIV/AIDS program assistance.

PEPFAR Country Teams and DHAPP then work to create a specific plan for each country.

"This process begins with the partner military creating (with DHAPP assistance as requested) an overall HIV/AIDS strategy, which is reviewed by the PEPFAR Country Team and DHAPP," Shaffer said.

In addition to assistance with strategic plans, DHAPP conducts on-site visits, collaborating with partner militaries, to determine areas in need of technical assistance and resource support. DHAPP supports defense forces in HIV prevention, care and treatment for HIV-infected



Cmdr. Roland Fahie (far right) and Lt. Joel Valdez (second from left) discuss strategy for the new blood donor center.

individuals and their families, and strategic information.

“DHAPP uses a ‘tool box’ of interventions that can be implemented force-wide quickly and efficiently,” Shaffer said. “Military personnel are trained as peer educators to educate fellow troops about the risk of HIV at home and on deployments.”

Other educational programs include informing those who have already been diagnosed with HIV.

“DHAPP also uses HIV prevention training specifically targeted toward those that already have HIV—Prevention with Positives (PwP),” Shaffer said. “This strategy educates HIV positive troops and their families so that they know how to reduce the risk of transmitting HIV.”

DHAPP supported counseling and testing services for 480,858 troops and family members, supported 611,542 troops and families with comprehensive prevention messages, and reached 73,668

people living with HIV/AIDS (PLHIV) with prevention with PLHIV (PwP) interventions during fiscal year 2012.

Another essential component of population-based HIV are blood safety programs designed to protect and ensure a safe blood supply. The Navy Blood Program has been providing technical assistance to partner militaries such as the Ethiopian National Defence Force for the past several years.

“The National Defense Blood Bank Center’s Donor Center and Blood Processing is housed at Bella Military Referral Hospital in Addis Ababa, Ethiopia,” said Cmdr. Roland L. Fahie, director, Navy Blood Program. “This is just one of several blood safety centers designed and supported by the DoD to support our global blood safety program. We just completed our second Blood Donor Center in the Mekele province in early January of this year. The U.S. Armed

Services Blood Program has been supporting the program since its inception in 2004 with ongoing technical support for blood program design, management, training, and supply logistics, and sustainment initiatives.”

“We have assisted with designing and building five blood safety centers, conducting several blood safety workshops, and providing technical assistance in Vietnam,” Fahie said. “We have been involved in designing one blood safety center and conducting several blood safety workshops in Cambodia, and provided technical assistance, blood safety workshops, and assisted with designing a blood center in Laos.”

Blood safety programs are complex and include:

- Infection Control measures to reduce the spread of blood-borne pathogens
- Design and management of the Defense Blood Program
- Safe blood collection (veni-

puncture)

- Measures to protect the defense blood supply
- Blood Safety and Patient safety
- Blood donor and infectious disease testing
- Quality Assurance and Quality Control Testing
- Safe blood donor collection
- Blood donor testing and methods of testing
- Pre-transfusion testing
- Proper blood selection
- Blood Administration
- Recognition and treatment of adverse transfusion reactions
- Blood Bank and Laboratory Safety

The partner military HIV programs DHAPP supports impact over 5 million troops and their family members around the world. DHAPP will continue the fight against HIV/AIDS, collaborating with partner militaries and programs like the Navy Blood Program, until an AIDS-free generation is created. +



Lt. Marcus McDonough examines Asian Tiger Mosquitoes during a preliminary joint Army and Navy study evaluating the efficacy of two different pesticides in sub tropical environments. (Photos by Lt. Jen Wright)

# DENGUE

## at the doorstep

By Lt. Jen Wright and Lt. Cmdr. Craig Stoops | Navy Environmental Center of Excellence

Dengue may not be as well known as malaria as an important human disease transmitted by mosquitoes. However, as climate change possibly spreads pathogens into new territory and the Navy turns its attention to Asia this may not be the case for much longer. Dengue, also known as Break Bone Fever, is a febrile disease characterized by high fevers, low platelet counts, nausea, vomiting and rash. There are four serotypes of dengue and infection with one serotype not providing protection from the others. In fact serial infection results in increased likelihood of developing dengue hemorrhagic fever or dengue shock syndrome.

Dengue is a daily threat to many Navy Sailors, civilians and dependents in areas such as Singapore and Guam. While not many dengue cases have been reported from this area to date, the Navy has experienced negative effects of having Sailors sta-

tioned in highly endemic areas in the past such as in Puerto Rico and the Philippines. For example, before closing Naval Station Roosevelt Roads, Puerto Rico in 2004 dengue presented a significant threat to Navy readiness for people living on and around the Naval Station. Dengue is endemic in Puerto Rico with isolated outbreaks being reported since 1915 and large island-wide outbreaks since the 1960's.

"The mosquitoes would eat you alive at dusk and dengue was a huge problem for the preventative medicine team," said Mr. Jose Medina, Navy Entomology Center of Excellence (NECE) administrative officer "Our preventative medicine teams worked with the locals to provide mosquito surveillance and control but we were still treating patients for dengue at the hospital."

Since 2004 when the base was closed, outbreaks have continued to occur on the island with over



"The **mosquitoes** would eat you alive at dusk and **dengue** was a huge **problem** for the preventative medicine team."

- Mr. Jose Medina | Navy Entomology Center of Excellence (NECE) Administrative Officer

Engineman 1st Class Jeremy Anderson exits a Conex box after spraying a thermal fogger loaded with pesticides being evaluated in the study.

10,000 cases reported in 2007. With the high amount of travel between Puerto Rico and the continental U.S., it is surprising that outbreaks of dengue haven't occurred with greater frequency. But the lack of cases in the continental U.S. over the last 50 years is believed to be due to infrequent contact between people and the viruses' best vector, *Ae. aegypti*, the yellow fever mosquito

Along with the resurgence of dengue worldwide the virus is making a comeback in areas of the continental U.S. In 2009 the first locally acquired cases of dengue in 50 years occurred in Key West, Fla. Given the large presence of U.S. Navy Sailors, civilians and dependents at Naval Air Station (NAS) Key West, this outbreak generated great concern. Local dengue transmission reoccurred in Key West during 2010 and in August 2012, locally acquired cases of dengue were reported in Miami-Dade County, Fla. Locally acquired cases have since been reported from Palm Beach, Martin, Hillsborough, Osceola and Seminole counties.

NECE, located in Jacksonville Fla., began studying the distribution of the yellow fever mosquito and Asian tiger mosquito to ascertain the risk of dengue transmission to U.S. Navy personnel in the region following the Key West outbreak in 2011. In the summer of 2012 NECE and Jacksonville Mosquito Control Division (JMCD) teamed up to study where the yellow fever mosquito was found in Jacksonville and to determine the population size.

According to Marah Clark, JMCD Entomologist, the study found significant populations of both species and what was especially surprising was that the population of the yellow fever mosquito was much larger than had been anticipated and much larger than the Asian tiger mosquito population.

"The NECE and JMCD team collected a total of 6,544 mosquitoes over a ten-week period. The yellow fever mosquito accounted for 78 percent and Asian tiger mosquito for 17 percent of the collections," said Cmdr. Peter Obenauer, NECE assistant officer-in-charge. "These results were significant

**"Dengue** cases in Key West served as a **warning sign** for Sailors, civilians stationed there and across Florida."

- Cmdr. Eric Hoffman, NECE officer-in-charge.



Mr. Vince Smith, Navy Entomology Center of Excellence, operates a thermal fogger inside of the Conex boxes used in the study.

because as of 2010 *Ae. aegypti* was believed by the JMCD staff to have been almost displaced by the less effective vector *Ae. albopictus*." Because everyone thought the yellow fever mosquito populations were low the thought was the risk of locally acquired dengue was therefore considered negligible. But this finding and the fact that continued local transmission of dengue in Florida has become a yearly occurrence has changed the equation.

One other positive finding of the study was that the insecticide treatments conducted by JMCD during the study period as part of their mosquito control program for West Nile virus vectors and other mosquitoes were extremely effective at lowering the *Ae. aegypti* populations. This provides evidence that the Jacksonville *Ae. aegypti* population can be controlled using standard mosquito control methods and if an outbreak were to occur, we wouldn't be helpless.

"Dengue cases in Key West served as a warning sign for Sailors, civilians stationed there and across Florida," said Cmdr. Eric Hoffman, NECE officer-in-charge. "As locally acquired cases are again a possibility in Key West and cases slowly creep north towards NAS Pensacola, NAS Jacksonville, NS Mayport and NSB Kings Bay, Navy Medicine personnel should be aware of the risk and be ready to consider dengue as a possibility. Preventive Medicine personnel must also be aware of increases

in mosquito populations, especially increases in the vector species *Ae. aegypti* and *Ae. Albopictus*, and be ready to implement effective prevention and control programs."

Currently as there are no vaccines available for the disease, avoiding contact with mosquitoes through personal protection methods such as wearing repellents that contain DEET and wearing a permethrin treated uniform continue to be the best practices for avoiding infection.

NECE has subject matter experts that provide surveillance and mosquito control and other control strategies against other blood-feeding insects that transmit human diseases.

"This center of mosquito experts provide vector surveillance and control training to civilian and DoD technicians who are responsible for ensuring disease vectors are monitored at U.S. DoD installations throughout the world," said Lt. Marcus McDonough.

Additional guidance on *Ae. aegypti* and *Ae. albopictus* control can be found in the the "Dengue and Chikungunya Vector Control Pocket Guide" (Technical Guide 47), which can be found on the Armed Forces and Pest Management Board's website at [www.afpmb.org](http://www.afpmb.org).

For assistance or information on control of any vector-borne disease contact NECE at [NECE-Fleet-Support@med.navy.mil](mailto:NECE-Fleet-Support@med.navy.mil). +

# Minimizing the Impact of an Outbreak

By Lt. Cmdr. Jennifer Wilkes, Lt. Michael Kavanaugh and Lt. Jenifer Scancellia | Navy Environmental and Preventive Medicine Unit Five



Lt. Cmdr. Jaqueline McDowell, NEPMU-5 preventive medicine officer, demonstrates the tracking system developed immediately following the Pertussis outbreak in Okinawa. (Photo by Lt. Roderick Medina)

**A** disease outbreak can be catastrophic — causing local devastation, threatening the welfare of large populations, depleting resources and compromising the country's infrastructure. With the current threat of terrorism, an outbreak may represent an act of bioterrorism and jeopardize national security.

The 1918 "Spanish Flu" is an example of just how deadly a disease outbreak can be. Considered to be the deadliest pandemic in the last century, the Spanish Flu was responsible for the death of more than 50 million people.

With vigilant surveillance and working together with other Federal, State, and local agencies an outbreak can be mitigated to minimize impacts or be eliminated all together.

A major role of the Navy Environmental and Preventive Medicine Units (NEPMU) is providing Force Health Protection and disease threat assistance to operational forces and Navy Medical Commands world-wide.

One tool to mitigate disease outbreaks is the use of public health surveillance systems. These systems provide early detection of an outbreak and then establish public health interventions to prevent and control the outbreak from spreading. NEPMU-5, based in San Diego, has been involved in, and at the

forefront of many outbreak investigations in the past few years.

In 2009, NEPMU-5 assisted in the pandemic H1N1 outbreak in the Navy Medicine West (NAVMEDWEST) region and provided risk communication and recommendations to Navy Medicine and the operational forces to mitigate the 2010 Pertussis (a.k.a. Whooping Cough) outbreak in San Diego.

NEPMU-5 conducted a hand, foot and mouth disease (HFMD) contact investigation aboard the USS ABRAHAM LINCOLN (CVN-72) in 2011, resulting in a case definition for HFMD from which 47 crew members met criteria. The unit recommended medical isolation for the affected individuals. This curtailed the spread of this illness to the remainder of the crew and thus ensured a national security asset was able to continue its mission.

In May-July 2012, NEPMU-5 led the tracking of the Pertussis outbreak for the NAVMEDWEST region. After identifying multiple cases of Pertussis in individuals of varying ages in Okinawa, NEPMU-5 was tasked by the NAVMEDWEST Chief of Staff to track Pertussis incidents in the respective Area of Operation. To expedite data collection, the unit developed an online SharePoint Pertussis tracking website. With the assistance of the Navy and Marine Corps Public Health

Center (NMCPHC) Epidemiology Data Center (EDC), a Microsoft Office Excel spreadsheet was created and made accessible via the NEPMU-5 SharePoint site. All Public Health Emergency Officers (PHEO), assistant PHEOs and key personnel were given access to the NEPMU-5 Pertussis site allowing for up-to-date and timely tracking of Pertussis cases in their respective AORs. The Excel spreadsheet allowed personnel to group cases by age, beneficiary status, new cases, suspected cases, and confirmed cases; with the ability to update and change this data at any given moment as new information became available. The EDC created an automated system to calculate the values which were linked to a PowerPoint slide for presentation for the senior leadership decision makers. A discussion board on the Pertussis tracking website was developed so all individuals involved could share ideas and stay updated in a common forum.

"Providing access to Share Point enables us to gather up-to-date data throughout the AOR, to include Okinawa, Yokosuka, Guam, Hawaii and the West Coast instantly," said Cmdr. James Dunn, NEPMU-5's Public Health and Surveillance department head and the NAVMEDWEST PHEO. "It saved us time by preventing multiple phone calls and emails allowing PHEO users to update on the fly and report results instantaneously."

Due to persistent efforts from all personnel involved, there were no deaths or hospitalizations associated with this outbreak. The tools utilized by NEPMU-5 response coordinators played a valuable role in disaster planning and emergency response. By providing NEPMU-5 with the opportunity to test their public health emergency response they ensured capable communication and coordination between multiple PHEOs and assistant PHEOs from 11 different regional Military Treatment Facilities.

According to one PHEO, the evolution demonstrated the great network that Navy Medicine has in the public health community. All efforts were essential to improve upon a system that will be invaluable when coordinating future public health events. +

# THERE'S AN A

## Navy creates smartphone application for

By Katherine H. Crawford | Office of Naval Research Public Affairs



The Office of Naval Research (ONR) is co-funding an affordable, hi-tech, solution for managing stress that could help

prevent post-traumatic stress disorder (PTSD), helping warfighters and potentially saving billions of dollars in associated medical costs, officials announced March 6.

ONR, in conjunction with the Defense Advanced Research Projects Agency, is sponsoring development of the Stress Resilience Training System

(SRTS), an iPad app training program that teaches Sailors and Marines to understand their stress responses and manage them by learning biofeedback techniques that work for their individual needs.

The system will undergo field testing at the Naval Center for Combat and Operational Stress Control (NCCOSC) in San Diego in April.



# APP FOR THAT

## For managing stress and fending off PTSD

Lessening the impact of PTSD to warfighters, the military and the nation is crucial. According to a February 2012 Congressional Budget Office report, 21 percent of military personnel returning from overseas contingency operations (OCO) in Afghanistan and Iraq suffer from PTSD. The cost to treat these individuals is nearly 3.5 times higher than for someone without PTSD or traumatic brain injury,

which works out to close to \$1 billion when multiplied by the total number of OCO patients.

“The SRTS app provides users with an easy-to-access tool that helps them build resilience toward stressful events so that when they encounter those events, the likelihood of experiencing PTSD or any other aftereffects from stress is reduced,” said Cmdr. Joseph Cohn, program officer in

ONR’s Warfighter Performance Department and originator of the SRTS project.

Using only an iPad and a heart rate monitor clipped to one earlobe, the SRTS App comprises four sections: “Know How,” which provides Sailors and Marines with information about stress and resilience and how to apply this knowledge to their missions; “Techniques,” which explains how they can bring themselves into the best mental and physiological state possible to build resilience and achieve peak performance; “Games,” which allows them to practice applying the resilience skills learned; and “Review,” which helps them track their training progress.

The game-based app allows players to choose from several increasingly challenging training scenarios while the monitor records when the heart rate rhythm, also known as heart rate variability, becomes incoherent - a sign of stress. Through game-play, Sailors and Marines will learn which techniques, such as deep breathing or muscle relaxation, help them maintain or regain coherence, to manage their unique stress responses. Once learned, users can transfer these approaches to real-life situations.

“We’re capitalizing on past research and making a leap that one way of managing PTSD lies in learning to more effectively manage your stress,” Cohn said.

The SRTS is unique because it pulls together two proven premises - that novices and experts manage stress in different ways, so there’s the potential for training, and that good training requires

good feedback. It then combines them with an already established distribution point: the NCCOSC, which focuses on promoting resilience and investigating best practices in diagnosing and treating PTSD.

Preventing PTSD is critical for mission preparedness and success, and it goes to the heart of one of the chief of naval operations’ “Sailing Directions,” that the Department of the Navy has “a professional and moral obligation to uphold a covenant with Sailors, civilians and their families - to ably lead, equip, train and motivate.”

“The SRTS’s development and operational evaluation would not have been possible without the funding we received from DARPA and ONR, who exhibited a willingness to take risks that yield significant S&T advances” said Dr. Gershon Weltman, vice president of Perceptronics Solutions, the prime contractor for the app’s development. +

Stress Resilience Training System introduction Video



# NMRC Wound Infections Department Benefits Wounded Warfighters

From Naval Medical Research Center Public Affairs

In keeping with the ever-changing needs of the U.S. Military, the Naval Medical Research Center's (NMRC) Wound Infections Department (WID) was established in September 2011 in response to the Navy Surgeon General's call for research activities that will provide direct benefit to our wounded warfighters. Wound infections are often difficult and costly to treat both in the hospital and during prolonged care and also have a significant impact on military readiness and the overall health and well-being of the fleet.

The primary mission of WID is to develop and evaluate novel and alternative treatment and prevention strategies for skin and soft tissue infections (SSTIs) associated with multi-drug resistant organisms. In the short time since WID's inception, researchers have developed a close collaboration with the Walter Reed Army Institute of Research's Bacterial Rickettsial Disease Wound Infection Department. This collaboration led to the development of a simulated traumatic wound infection mouse model used for the testing and developing of novel antibacterial strategies. Currently researchers are developing therapeutics such as bacteriophage and photodynamic therapy that may be directly applied to traumatic wounds in order to reduce infection rates and significantly reduce patient morbidity and resource utilization. When extrapolated to the total combat-injured population, the successful use of these therapeutic approaches for preventing and treating infection may translate to significant cost savings and better medical care.

Another important objective of

WID is to conduct immunologic studies to identify and characterize correlate(s) of protection for SSTIs. In collaboration with investigators at the Uniformed Services University of the Health Sciences, WID researchers are studying human immunologic response to SSTIs caused by organisms such as *Staphylococcus aureus*, including methicillin-resistant *Staphylococcus aureus* (MRSA). Research results may become critical for developing protective vaccines in the future.

Although the main focus of WID is treatment and vaccine development, the department is working in close collaboration with clinical investigators at the Walter Reed National Military Medical Center to quickly identify pathogens infecting the wounds of the warfighter. Towards that aim, researchers are developing a core facility and have acquired a Becton-Dickenson Phoenix. This machine is a powerful tool for the rapid diagnosis of bacterial infections and enables physicians to deliver timely and appropriate treatment. Early implementation of appropriate treatment leads to earlier resolution of symptoms, prevention of complications, and reduction of patient morbidity.

"I am very proud of the hard working WID staff," said Capt. Eric Hall, department head. "In just under two years, Cmdr. Nimfa Teneza-Mora, Lt. Danett Bishop, and Lt. Rebecca Pavlicek have effectively expanded NMRC's capabilities, covering the spectrum from animal modeling to vaccine development."

The WID continues to build collaborative efforts to address battlefield wound management.+





**Lt. Rebecca Pavlicek, Naval Medical Research Center, works in the Wound Infections Department. (Photo by Hospital Corpsman 2nd Class Kyle Oldknow)**

# NAMRU-3 Supports Disease Surveillance Capabilities in Mauritania

From U.S. Naval Medical Research Unit No. 3 Public Affairs

The U.S. Naval Medical Research Unit No. 3 (NAMRU-3) is assisting the Islamic Republic of Mauritania to augment its national influenza reference laboratory and establish a viral hemorrhagic fever (VHF) molecular identification capability. Mauritania is striving to meet the 2005 International Health Regulation implementation benchmarks while managing the public health response to endemic and recurring VHF outbreaks.

With Department of State and Global Emerging Infections Surveillance and Response System funding, staff members from NAMRU-3's Viral and Zoonotic Disease Research Program traveled to Nouakchott to evaluate influenza surveillance activities and work on capacity building efforts at the Institut National de Recherches en Santé Publique (INSRP) and also assist the Ministry of Health (MoH) to develop a VHF surveillance network.

The team conducted an assessment of influenza-like illness and severe acute respiratory illness sentinel sites at the Centre Hospitalier National and Polyclinique de Nouakchott. They also conducted on-site refresher training on proper storage and transport of surveillance samples to maintain cold chain integrity. They trained five staff members on influenza typing and subtyping.

“One of the key goals in establishing a National Influenza Center in Mauritania is to provide the opportunity for representative influenza isolates in the AFRICOM region to be available for consideration during the biannual WHO/CDC influenza vaccine selection meetings,” said Lt. Gabriel Defang,



U.S. Naval Medical Research Unit No. 3's Mustafa AbdelAziz conducts training for Institut National de Recherches en Santé Publique lab staff on VHF ELISA techniques. (Photo by Lt. Gabriel Defang)

deputy head of NAMRU-3's Viral and Zoonotic Diseases Research Program.

The NAMRU-3 team also assisted the MoH in developing protocols for conducting human and animal surveillance for viral hemorrhagic fever diseases. As part of the VHF laboratory capacity building initiative, the team conducted a three-day training session on molecular and serological techniques in detecting VHF pathogens. During the hands-on training, INRSP technicians used archived, untested samples from a recent hospital-based cluster of unidentified hemorrhagic disease. Molecular testing indicated that some of the samples were positive for Rift Valley Fever, a hemorrhagic disease associated with high mortality. The positive results confirmed, for the first time, the identity of the pathogen associated with the recent cluster. The

successful completion of the training provided confirmatory diagnosis of VHF agents, which is a major milestone in Mauritania's public health capability. This service had previously been provided by the Institut Pasteur in the neighboring country of Senegal.

The Secretary General of the MoH, the Hon. Sidi Ali Boubacar, said he was delighted with the new lab capabilities and thanked NAMRU-3 for its assistance. NAMRU-3 will continue to work with the INRSP and the MoH to strengthen disease monitoring and other public health capacities in Mauritania.

Defang said, “With the presence of international military forces fighting extremists in neighboring Mali, effective disease surveillance in Mauritania will provide critical force health protection medical data for international allied troops in Mali.” +



Model residential huts constructed by U.S. Naval Medical Research Unit No. 6 in Iquitos for testing novel combinations of mosquito attractants and repellents.

# Taking the bite out of insect-borne diseases

From U.S. Naval Medical Research Unit No. 6  
Public Affairs

Deployed U.S. military personnel are often exposed to insect-borne diseases. The Entomology Department at the U.S. Naval Medical Research Unit No. 6 (NAMRU-6) leads research projects in surveillance and control of insect vectors of dengue fever, malaria and leishmaniasis and collaborates with local Peruvian universities and the Ministry of Health to develop better mosquito and sand fly control strategies.

One novel mosquito control strategy is focused on testing new combinations of mosquito attractants and repellents applied inside a series of model residential huts, a design meant to replicate the living environment typically found in the tropical cities of Peru and other South American cities. This research will help determine the effect of insect repellents on the movement patterns of mosquitoes and whether it may be possible to achieve successful repellency of mosquitoes from residences or whether the mosquitoes will simply move to another untreated location. Data gained from this project

could guide further study of the pre-treatment of tents for deployed personnel and whether this may be a useful strategy during contingencies.

The Entomology Department also performs insecticide resistance bioassays on the vector of dengue fever, *Aedes aegypti*, and on the malaria vector, *Anopheles darlingi*, by exposing groups of mosquitoes to the primary chemical groups (e.g., pyrethroids and organophosphates) used in their control to establish a resistance-profile baseline against reference populations of known susceptible mosquito strains. A collaboration between NAMRU-6 and the University of San Marcos in Lima led to the establishment of an insectary to rear mosquitoes for use in bioassays to determine insecticide resistance levels. Although mosquito populations in Peru may only represent a fraction of all populations worldwide, refining the testing process with field-collected insects is critical, and the variety of ecosystems in Peru, such as desert, tropical rainforest, and mountain, enables the testing of numerous strains of varying insecticide-resistance status, a condition that could be encountered

anywhere in the world.

The Department of Entomology supports Peru in building the capacity to conduct vector-borne disease research through collaboration on these projects, providing equipment and technology training, and designing future studies to address local public health concerns. A previous dengue fever outbreak in Iquitos provided the opportunity for NAMRU-6 to assist the Ministry of Health by providing specialized mosquito traps to capture the *Aedes aegypti* vector and supporting the surveillance and control efforts of the public health staff to control this disease. In addition, capacity-building training courses on mosquito surveillance have been provided to DISAMAR (Dirección de Salud de la Marina de Guerra del Perú) personnel and have included mosquito collection methods, species identification, basic ecology and habits, and the procedures for insecticide resistance testing.

The entomology program continues to fulfill NAMRU-6's mission to protect deployed U.S. forces throughout the world while solidifying relationships with host nation entities. +

# The History of Navy

By **André B. Sobocinski** | U.S. Navy Bureau of Medicine and Surgery Historian

**S**eventy years ago, as the battle for the Solomons raged in the Pacific, publication history was being made at the offices of Bureau of Medicine and Surgery (BUMED) in Washington, DC. On 5 March 1943, Navy Medicine Magazine was born as a 25-page, bi-weekly “digest of timely information” called “The BUMED News Letter.”<sup>1</sup>

Originally a product of the BUMED Research Division,<sup>2</sup> and edited by tetanus toxoid immunization pioneer Capt. William Winthrop Hall,<sup>3</sup> The News Letter served as an information bulletin of “current” Navy medical research and news from the field, and was distributed to Navy medical officers ashore and afloat via regular and “V” mail.<sup>4</sup> As a news source, it holds at least one distinction: the first Navy publication to announce that “synthesis of penicillin” was finally possible for the U.S. Armed Forces.<sup>5</sup>

By appearances, the original BUMED News Letter may seem a far cry from the Navy Medicine Magazine we now know. In its 70-year history the publication has evolved from a modest black and white letter pressed newsletter to the glossy four-color quarterly we enjoy today.<sup>6</sup> One of the present-day hallmarks of the magazine are the covers which have become the “window of Navy Medicine,” showcasing everything from heroic hu-

manitarian efforts, mass casualty drills, to the portraits of the dynamic men and women who comprise the greater Medical Department.

The vivid full-bleed cover imagery, however, was a gradual development. The first cover photograph—an image of the first surface nuclear ships, USS Enterprise, USS Long Beach and USS Bainbridge in formation in the Mediterranean—did not appear until October 1962 (Vol. 44, No. 7). The December 1969 issue (Vol. 54, No. 6) marked the first time a color photograph appeared on the cover.<sup>7</sup> The January 1976 issue (Vol. 67, No.1), featuring a physician assistant at the Naval Support Activity in Brooklyn, N.Y., marked the first full-bleed cover in the magazine’s history.

Since 1943, the magazine has been overseen by 15 different editors-in-chief as well as six managing editors. During this same time span, the Navy Medicine Department has been lead by 19 different Navy Surgeons General and 29 Deputy Surgeons General. In December 1953, Dr. Leslie Marshall, a retired Medical Corps captain, became the first civilian editor of the publication.<sup>8</sup> From April 1979 to November 2008, Jan K. Herman stood at the helm of the magazine earning the distinction as the longest tenured editor; in those 29 years, Herman and his magazine staff produced 201 issues. For many years, Jan Herman used to joke that one did not become Surgeon General of the Navy without having written for the magazine and certainly there was some truth to

that. During his tenure, four future Surgeons General wrote for the magazine.<sup>9</sup>

In this information age, as “flash in the pan” magazines come and go, Navy Medicine Magazine is a proven survivor that can boast of being the third oldest Navy periodical in continuous production as well as a consistent a vehicle of excellence. To this we can only add, “Happy Seventieth, Navy Medicine!”

## Footnotes

1. *Until 1949, The News Letter was BUMED’s third publication. From April 1907 to December 1949, BUMED’s publication division produced a bi-monthly journal called The U.S. Naval Medical Bulletin. Serving as the “house academic journal,” the Bulletin was a repository of first-hand experiences, news of naval medical advances, editorials, history, and book reviews. In 1917, The Hospital Corps Quarterly was established as a supplement to the Bulletin and created to impart information and instruction to members of the Navy Hospital Corps. In 1943, the Quarterly was transformed into a popular wartime magazine that showcased the Navy medical community, and featured history articles, comic strips, and excerpts from Navy Hospital newspapers. In many respects today’s magazine is more closely related to the wartime Quarterly than either The BUMED News Letter or The Naval Medical Bulletin.*

2. *The News Letter was originally conceived as a Navy Medical Research news source that presented the latest information on scientific matters with “practical value” to medical officers.*

3. *Capt. (later Rear Adm.) Hall (1892-1978) began experimenting with tetanus toxoid immunization in the Navy beginning 1934 aboard hospital ship USS Relief. In 1938, he immunized the entire student body at the Naval Academy against tetanus and then helped oversee immunization for the entire Navy and Marine Corps. Thanks to his tireless work, not one Sailor or Marine was affected by tetanus in World War II.*

4. *“V” or “Victory” mail was a hybrid*

**For many years, Jan Herman used to joke that one did not become Surgeon General of the Navy without having written for the magazine ...**

# Medicine Magazine



HM2 David VanGelder, N945



## Navy Medicine Mobilizes for Desert Shield

### USNS *Comfort*

Less than 3 weeks after Iraq invaded Kuwait, almost 800 uniformed men and women at National Naval Medical Center (NNMC), Bethesda, MD, were on their way to support Operation Desert Shield. They were assigned to the Medical Treatment Facility (MTF) and USNS *Comfort* (T-AH 20), a hospital ship designed to provide

health care for casualties in an armed conflict.

Events began to unfold 2 Aug 1990 when Iraqi tanks rumbled across the Kuwaiti border and Iraq's Saddam Hussein proclaimed Kuwait "annexed" to his country. President Bush ordered U.S. forces to the region and Navy warships steamed for the Persian Gulf.

On 9 Aug, NNMC's commander received orders to mobilize the MTF aboard *Comfort* and an around-the-clock evolution was set in motion to get the crew, divided into two stages, underway. Crewmembers attended briefings, updated personnel and health records, executed wills, received inoculations, collected "dog tags" and Geneva convention cards,

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NAVY MEDICINE

A spread from the September-October 1990 issue of Navy medicine Magazine features Navy Medicine's deployment for Operation Desert Shield. (Photo courtesy of U.S. Navy Bureau of Medicine and Surgery Public Affairs)

mail process that involved converting the letter or document to microfilm and then printing it at a processing center located at the mailed destination (e.g., naval base, ship, etc.)

5. The BUMED News Letter, Vol. 2, No. 1, pg. 9.

6. In its 70-year history the newsletter morphed from a publication released every two weeks (1943-1959) to a monthly (1960-1983) to a bimonthly (1983-2009) and finally a quarterly (2010 to Present). The names of the publication

have changed as well. Originally known as *The BUMED News Letter* (March 5, 1943-December 1947) it was later known as the "U.S. Navy Medical News Letter" (1948-1970) "U.S. Navy Medicine Magazine" (January 1971—Jan/Feb 1987) and finally "Navy Medicine Magazine" (March-April 1987-Present).

7. Uncaptioned image showing a Navy physician dressed up as Santa Claus in Vietnam. Credited to Capt. John Stover.

8. Dr. Marshall was first appointed editor of the publication in August 1950

while still on active duty.

9. Vice Admirals Richard Nelson, Michael Cowan, Donald Arthur and Adam Robinson each wrote for the magazine before becoming flag officers.

10. *Naval Aviation News* is the oldest Navy periodical in continuous production. It was founded in 1917 as a "weekly news letter" of the Navy Bureau of Aeronautics. The second oldest is *All Hands* magazine which was established as the *Navy Bureau of Navigation Information Bulletin* in August 1922. +

# Dr. Boone and the Creation of the Medicine Ball Cabinet

By André B. Sobocinski | U.S. Navy Bureau of Medicine and Surgery Historian



President Herbert Hoover and “The Medicine Cabinet” play his namesake game, “Hoover Ball” in Winter 1933. (Photo courtesy of the Herbert Hoover Presidential Library and Museum)

**T**he president’s cabinet is convening this morning, but you will not find them in any boardroom or oval office. This is 1929 and the president is on the south lawn of the White House immersed in a new morning ritual that the press has dubbed “Hoover Ball.” Starched shirts and polished shoes have been replaced with athletic sweaters and

well-worn sneakers in this “Medicine Ball Cabinet” as Herbert Hoover and his close confidants fling an eight-pound leather ball over a nine-foot net under the watchful eye of Dr. Joel Boone, of the U.S. Navy.

Dr. Joel Boone is a legendary figure in Navy Medicine. A Medal of Honor recipient noted for heroics in France and Haiti, he is also credited for adapting helo-decks on Navy hospital ships, reforming health and sanitary conditions

in U.S. coal-mines, and serving as the namesake of a Navy clinic in Little River, Va. In the 1920s and 30s, Boone was seen by many as the consummate, and perceivably perennial, practitioner of White House medicine. He first earned his keep as the assistant White House physician to Presidents Warren G. Harding and Calvin Coolidge, and then primary physician to Herbert Hoover.

In 1928, when President-elect Herbert Hoover and his wife Louise traveled

to South America on a goodwill tour to outline U.S. economic and trade policies, Coolidge sent Dr. Boone to accompany the Hoovers on their return voyage from Montevideo aboard USS Utah. It was aboard this battleship that Boone first noted the president-elect's sedentary lifestyle. Boone convinced Hoover to start throwing a medicine ball around for a few minutes each day. Other members of Hoover's party soon joined in this daily plyometric play. In his unpublished memoir, Boone recalled that "it was just passing the ball in a circle, one to the other. Then, having been acquainted with deck tennis in my earlier days cruising long distances aboard ship ... I conceived, in a limited space, using the medicine ball to play a modified game of tennis, as it were, ... throwing it with our hands across the net, which was kept high, with players on the deck."

On March 10, 1929, six days after Hoover's inauguration, Boone conducted a physical examination on the new president noting that the 54-year-old man's health was good except that he suffered from dyspnea, carried too much avoirdupois around the abdomen, and his pulse was not as strong as expected. Boone reviewed the results with Hoover in considerable detail, outlined a special diet to keep his weight down, and advised him on developing a regular exercise routine.

With curiosity about the president's health abound, reporters pestered Dr. Boone on how he was planning to keep the weighty leader in shape. Boone may have erred when he responded that he was "open to suggestions." Hosts of concerned citizens soon flooded Boone with their own recipes for good health while health and fitness entrepreneurs championed their newest (and suspect) advances in fitness technology. In the end, Boone retreated from the armies of opinions and dubious technologies and settled on his own method of fitness—the medicine ball.

Dr. Boone proceeded to plan the morning routine of a medicine ball toss. He marked out a rectangular court for a tennis net on the south lawn of the White House, near the fountain. The game would be held at 7:15 every morning, regardless of weather, and open to



**President Herbert Hoover playing his namesake game, "Hoover Ball" in Winter 1933.**  
*(Photo courtesy of the Herbert Hoover Presidential Library and Museum)*

the president's advisers and associates.

Newspapers started taking notice of this ritual and calling its participants "The Medicine Ball Cabinet." Richard Oulahan of The New York Times, observed that "Surgeon Boone of the navy whose specialty is the health of Presidents, is a member of the medicine ball cabinet—in fact their liveliest of all its members, who sets the pace for this strenuous pastime in the backyard of the White House—and he keeps watch to curb any tendency of Mr. Hoover to over-exert himself. From all accounts this daily brief period devoted to tossing the ball back and forth has been very beneficial to the President."

When his term ended 1933, Hoover

distributed autographed medicine balls to his trusted advisors as keepsakes of their time in office. One wonders if Mr. Hoover hoped these simple exercise tools would overshadow a legacy that included the "Crash of '29" and the notorious "Hoovervilles." Certainly, as a symbol of exercise and wellness, the medicine ball should not be tossed aside. Hoover went on to enjoy the longest retirement of any U.S. president, dying on Oct. 20, 1964 at the age of 90. His long life may have been the result of successively coping with stress, a longtime passion for fishing, or maybe, thanks in part to an innovative Navy man named Boone, and a little game called "Hoover Ball."+

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