



Navy and Marine Corps Medical News



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MEDNEWS Items of Interest

Navy and Marine Corps Combat & Operational Stress Control Conference 2012: "Joining Forces to Strengthen Resilience." - May 22-24, 2012 at the Town & Country Resort and Convention Center, 500 Hotel Circle N., San Diego, CA 92108 To submit a proposal for papers, posters, exhibitors, or award nominations, please login on the upper left. Once logged in, click on "Submit a Proposal". <http://cosc.scs submissions.com/index.aspx>. Deadline: Dec. 9.

November marks the celebration of Warrior Care Month

Navy Weeks 2012 - Navy Medicine will be participating in the following 2012 Navy Weeks: New Orleans (April 16-23), Nashville (May 7-13), Baltimore (June 13-19), Boston (June 29-July 6), Chicago (Aug. 13-20) and Buffalo (Sept. 10-17)

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Did You Know?

Navy Medicine announced the launch of a new informational video and posters detailing the health dangers associated with the use of Spice and other designer drugs Nov. 1. For more information go to: <http://www.med.navy.mil/Pages/Spice.aspx>

Navy Medicine says farewell, welcomes new surgeon general

From U.S. Navy Bureau of Medicine and Surgery Public Affairs

BETHESDA, Md. - The top doctor for the U.S. Navy and Marine Corps stepped down from the position of the Navy surgeon general and chief of the Navy Bureau of Medicine and Surgery during a change of command ceremony at the Walter Reed National Military Medical Center-Bethesda, Nov. 18.

Vice Adm. Adam M. Robinson, Jr.'s four years of service as Navy surgeon general was the twilight of a naval career that spanned 34 years.

Chief of Naval Operations Adm. Jonathan Greenert was the keynote speaker for the ceremony and detailed many of Robinson's achievements.

According to Greenert, Robinson will leave a lasting legacy including the development of a new comprehensive care

model focused on patient and family-centered care that expertly balanced the dual mission of providing readiness for thousands of Sailors and Marines deployed to war zones while maintaining world class care at home.

"Robinson served those who served," said Greenert. "His profession is very critical to our primary mission of warfighting. He's ensured that our Sailors, our Marines and their families are ready for that fundamental responsibility of warfighting."

The impact of Robinson's service can be measured in the lives saved in places like Haiti and Afghanistan where there is the lowest battlefield mortality rate in history and in care he ensured was provided every day to Sailors, Marines, and their families around the world.

See Farewell, Page 3



U.S. Navy photo by Sharon Renee Taylor/Released

BETHESDA, Md. - Chief of Naval Operations Adm. Jonathan Greenert (left) and Vice Adm. Adam Robinson, Jr., applaud for Vice Adm. Matthew Nathan as he takes the position as the 37th U.S. Navy surgeon general during a change of command ceremony at Walter Reed National Military Medical Center, Nov. 18.

Nathan receives third star, becomes Navy surgeon general

By Sarah Fortney, Walter Reed
National Military Medical Center
Public Affairs

BETHESDA, Md. - Rear Adm. Matthew L. Nathan, commander of Navy Medicine for the National Capital Area, officially received his third admiral's star Nov. 18, during his promotion to Surgeon General of the U.S. Navy.

During a ceremony at the Walter Reed National Military Medical Center, at Bethesda, the former WRNMMC commander was pinned by his wife, Tammy and daughter, Bobbie. Adm. Jonathan Greenert, Chief of Naval Operations, promoted Nathan. Nathan will relieve Vice Adm. Adam Robinson, who retires Nov. 18 during a separate ceremony at the hospital.

"I'm very honored to do this," said Greenert of promoting Nathan.

After receiving his third star, Nathan asked a long-time friend, Lisa Hudson, to assist him with his new uniform jacket, which signifies his position as vice admiral. Hudson's husband, John Hudson, encouraged Nathan to join the Navy, unfortunately, in October 1983, he was killed in the line of duty. Nathan said he was honored to have Lisa participate in the ceremony, as she has kept her husband's memory alive.

He went on to express his appreciation for his family and their support.

"This promotion, it's really a result of Tammy and Bobbie," he said.

Nathan has achieved many milestones throughout his naval career. As com-



U.S. Navy photo by Sarah Fortney/Released

BETHESDA, Md. - Adm. Jonathan Greenert, Chief of Naval Operations, left, laughs as Rear Adm. Matthew L. Nathan, commander National Capital Area, has his shoulder boards attached by his wife and daughter during a ceremony at Walter Reed National Military Medical Center, Nov. 18. Nathan was promoted to vice admiral and U.S. Navy surgeon general and will relieve retiring Vice Adm. Adam Robinson.

mander of the former National Military Medical Center, he helped oversee the largest military medical integration and construction project in the history of military medicine.

Additionally, Nathan holds an appointment as clinical professor of medicine at the Uniformed Services University of the Health Sciences, and has received the American Hospital Association Excellence in Leadership award for the Federal Sector. His personal awards include the Distinguished Service Medal; Legion of Merit (5); Meritorious Service Medal (2); Navy and Marine Corps Commendation Medal and Navy and Marine Corps Achievement Medal (2).

Having received his Bachelor of Science from Georgia Tech and Doctor of Medicine from the Medical College of Georgia, Nathan completed his internal medicine specialty training in 1984 at the University of South Florida. He then served as the Internal Medicine department head at Naval Hospital Guantanamo Bay, in Cuba. In 1985, he transferred to the Naval Hospital, Groton, Conn., as leader of the Medical Mobilization Amphibious Surgical Support Team, then went on to Naval Medical Center San Diego in 1987 to serve as head of the Division of Internal Medicine, with additional duty to the Marine Corps, 1st Marine Division.

In 1990, Nathan served as a department head at the Naval Hospital Beaufort,

S.C. He then reported to Naval Clinics Command in London where he participated in military-to-military engagements with post-Soviet Eastern European countries, and in 1995, was assigned as specialist assignment officer at the Bureau of Naval Personnel providing guidance to more than 1,500 Medical Corps officers. In 1998, he accepted a seat at the joint Industrial College of the Armed Forces in Washington, D.C., then served as the fleet surgeon, Forward Deployed Naval Forces commander, U.S. 7th Fleet aboard the flagship USS Blue Ridge (LCC 19) out of Yokosuka, Japan.

Board certified with fellow status in the American College of Physician and the American College of Healthcare Executives, Nathan has also served as deputy commander of Naval Medical Center Portsmouth, Va., in 2001, then assumed command of Naval Hospital Pensacola, Fla. There, he oversaw Navy medical relief efforts in the wake of Hurricanes Ivan, Dennis and Katrina.

In 2006, Nathan transferred from fleet surgeon to commander of U.S. Fleet Forces Command, where he assisted in organizing the Fleet Health Domain integration with the Fleet Readiness Enterprise. He was then assigned, in 2007, as commander of Naval Medical Center Portsmouth and Navy Medicine Region East, before serving as commander of NNMC from August 2008 until September 2011.

 **Navy and Marine Corps
Medical News** 

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Navy Medicine video highlights Spice risks

From U.S. Navy Bureau of Medicine and Surgery Public Affairs

WASHINGTON - Navy Medicine announced the launch of a new informational video and posters detailing the health dangers associated with the use of Spice and other designer drugs Nov. 1.

The videos and posters will be distributed for display throughout the Fleet and available for download at: <http://www.med.navy.mil/Pages/Spice.aspx>.

The information and educational communication products focus on the real and present risks, particularly the negative health effects, associated with the usage of the unregulated synthetic marijuana commonly referred to as Spice.

The campaign's slogan, "Spice: It's Not Legal. It's Not Healthy. It's Not Worth It!" has had a resonating effect with YouTube viewers and on the Navy Medicine Website as the Navy surgeon general looks to break through to Sailors and Marines and make a positive impact.

"It is paramount all Navy and Marine Corps personnel are aware of the adverse health effects of this drug," said Vice Adm. Adam M. Robinson, Jr., U.S. Navy surgeon general and chief, Bureau of Medicine and Surgery. "Serious side



A Navy Medicine Spice poster. Navy Medicine announced the launch of a new informational video and posters detailing the health dangers associated with the use of Spice and other designer drugs Nov. 1.

effects have been reported after its use including tremors, panic attacks, delirium, impaired coordination, seizures, paranoid hallucinations, and psychotic symptoms

that can last for days, even months in some cases."

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Farewell

From page 1

"The innovations he brought forward in the continuum of care and for medical readiness has brought us to the point where 98 percent of those wounded survive in combat today," said Greenert.

Upon taking the podium to a round of applause, Robinson thanked Greenert for his inspired leadership and his lasting support to the men and women of Navy Medicine.

"The men and women of Navy Medicine are the essence and heart and soul of Navy Medicine," said Robinson. "I have been incredibly privileged and honored to lead them, and I have enjoyed every moment of that experience and I thank you all for the opportunity."

Robinson reaffirmed his commitment to providing quality healthcare not only for the military servicemen in uniform today but the importance of taking care of the nation's wounded warriors for many years to come.

"We as Americans must pledge our undying assistance to help our wounded warriors and their families reintegrate to the mainstream of our community," said Robinson. "Not as men and women to be pitied, but as Americans who have given much to secure our freedom and have much more to contribute."

Robinson said wounded veterans deserve not only quality healthcare today and tomorrow, but they must be offered career opportunities as they transition out of the military.

"Our wounded warriors know how to serve," said Robinson. "Let them. Our country's character will be strengthened and will help define us as a great nation that both honors and affirms the men and women who have given service to our country."

Greenert also welcomed Vice Adm. Matthew Nathan as Naval Department's new top uniformed medical officer.

"What is beautiful about our system is no matter how good things are, there is always someone coming behind to take the watch and carry on," said Greenert.

"You are exactly the kind of leader with the right background to lead this community forward."

Nathan, the newly appointed 37th Navy surgeon general and chief of Navy Bureau of Medicine and Surgery, took the podium after Robinson, thanking him for his long trend of always putting service above self.

"I can't thank you enough for the great shape you left Navy medicine in and for all you've done for your shipmates," said Nathan. "You've been a tireless advocate for the troops, for our own people and for me. You have my undying gratitude."

Nathan provided an overview of his vision for the future of Navy medicine which included a focus on warfighter support, taking care of the caregiver, readiness, harnessing information management systems and joint operations.

"We must look at the value of all we do measured by quality times capability, all divided by cost," said Nathan. "We cannot predict the future, but we can be ready for it."

Navy Medicine visits schools during San Antonio Navy Week

By Navy Medicine Support Command Public Affairs

SAN ANTONIO - The Navy's Medical Service Corps director, who is also the director of Navy Medicine Support Command, visited nearly 100 high school students Oct. 26 as part of the Navy's largest community outreach program in southeast Texas.

Rear Adm. Eleanor Valentin met with John Marshall High School students during San Antonio Navy Week, a community outreach effort she said can significantly impact a community with an ever-increasing Navy footprint.

"We are in San Antonio to show San Antonio their Navy," she said. "The visit here to John Marshall gives the Navy a chance to increase awareness of the Navy and Navy Medicine among the students."

Valentin visited with health careers, Navy Junior Reserve Officer Training Corps and Science, Technology, Engineering and Mathematics students.

"The Army and Air Force have had a large presence in San Antonio for many years," she said. "This gave me a chance to talk about how the Navy is a global force for good, and how Navy Medicine plays an important role as part of that global force with our work in humanitarian assistance. Humanitarian assistance is a key element of the nation's maritime strategy."

Valentin also emphasized the importance of including STEM classes in their studies, whether they decide to join the Navy or work outside military service.

"The primary mission of Navy Medicine is to maintain a fit and healthy force," Valentin told students. "We depend on science and technology to perform our mission. We need scientists in medical



U.S. Navy photo by Senior Chief Mass Communication Specialist Gary Ward/Released

SAN ANTONIO - Rear Adm. Eleanor Valentin, commander of the Navy Medicine Support Command and director, Medical Service Corps, speaks to students at Marshall High School about San Antonio Navy Week and Navy medicine, Oct. 26. Navy weeks are intended to show the investment Americans have made in their Navy and increase awareness in cities that do not have a significant Navy presence.

research, we need engineers who can develop the highly technical equipment we depend on, and a foundation in math is essential in any of these areas. This is true in the Navy, Navy Medicine or in the private sector."

Valentin also talked about the work Navy Medicine is doing in San Antonio.

"Navy Medicine makes up the majority of Navy personnel serving in San Antonio," Valentin said. "Our commands are doing work in medical education and training, medical research, and in medical information systems. The work Navy Medicine is doing in San Antonio

directly impacts the Navy and the rest of the world."

San Antonio, historically home to numerous Army and Air Force commands and bases, now boasts the Navy's largest 'A' School - which is part of the Medical Education Training Campus (METC), a tri-service training facility opened as a result of the 2005 Base Realignment and Closure initiative.

San Antonio Navy Week, scheduled Oct. 24-30, coincides this year with the Randolph Air Force Base Air Show, and the 100th birthday celebration of Naval Aviation.

Spice

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Although in development for months, these new products launch on the heels of an announcement from 3rd Fleet leadership last week that 64 Sailors in their area of operation were identified as users of Spice in violation of the Uniform Code of Military Justice and will be held fully accountable as a result.

The synthetic chemicals in Spice-type products have a more potent effect on the brain than traditional marijuana, and the unregulated compounds are often mixed with unknown effects. According to Robinson, these products are not approved for human consumption, and there is no oversight of the manufacturing process. Similar to other drugs on the street, experts warn that no one ever knows what mixture of chemicals could be present in the drugs, and users are experimenting with the com-

bination of multiple products which can dramatically change or increase its effects on a case by case basis.

Robinson warns that rapid tolerance in some users can lead to increased dosage and addiction. Additionally, the use of synthetic marijuana has led to a surge in emergency room visits and calls to poison control centers, according to the DEA.

This past spring, Navy Medical professionals treated multiple patients at Naval Medical Center San Diego, Calif., for Spice usage, some resulting in months of inpatient treatment for persistent psychotic symptoms.

"It is not good enough to simply police our own actions with regards to Spice and other designer drugs," said Robinson. "These drugs are dangerous and we learn more about their damaging effects each day. It is essential that every Sailor and Marine be looking out for their colleagues to prevent injury to their health and their careers."

NMCS D hosts first operational medical symposium

By Mass Communication Specialist 1st Class Anastasia Puscian, Naval Medical Center San Diego Public Affairs

SAN DIEGO - Naval Medical Center San Diego hosted the first Operational Medical Symposium with 1st Marine Logistics Group Oct. 24-28.

OMS provided an opportunity for NMCS D staff, particularly those who have not deployed before, familiarization training on Fleet Marine Force medical equipment, the mission capabilities of the shock trauma platoon and forward resuscitative surgery system as well as gain some experience in tactical medical care, care under fire, and tactical evacuation in a simulated combat environment.

"Understand that when you raised your right hand and swore an oath it's going to take you abroad," said Senior Chief Hospital Corpsman Damon Sanders, OMS coordinator. "We're a nation still at war and with that, you're going to deploy, and when you do deploy you need to know your job. You need to be familiar with what's happening out there and not for the first time when you get there. We needed to take the steps here to make sure they have that [training and familiarization]. Not only mentally but physically prepared to go into combat operations."

During the OMS, NMCS D staff with field medical experience along with Hospital Corpsmen and Marines from 1MLG, based at Marine Corps Base Camp Pendleton, Calif., provided training and education to active duty staff on the actual equipment used in field medicine culminating on the final day with NMCS D's Tactical Combat Casualty Course which exercised two simulated combat scenarios where Hospital Corpsmen were able to apply their new technical skills on simulated injured patients.

"It's almost as realistic as it can get without actually being there and having hands on casualties," said Hospital Corpsman 3rd Class Richard Cheek, TCCC participant. "It's the best training I've seen and anyone that goes through it, I guarantee they will say the same thing. There are a lot of people who put a lot of time and effort into making it as realistic as possible."

Approximately 360 doctors, nurses and hospital corpsman participated in 90 minute training blocks of the five medical echelons of care used by Navy Medicine.

Echelons begin at the point of wounding, illness, or injury (the lowest level), and provide a continuum of care extending through prolonged rehabilitation.

"We wanted to bridge the language gap with this training," said Sanders. "One of the problems we have been having and noticing is there is a language barrier between the junior medical staff and the green side [Marines]. We wanted to focus our training on the junior corpsmen straight out of [hospital] corps school, the

junior nurses fresh out of school and our doctors who no longer after internship go through a general medical officer tour to get seasoned but go straight to their residency."

NMCS D routinely trains for mission readiness through combat operations courses such as Field Medical Training Battalion, Field Medical Service School and TCCC.

For more information on NMCS D go to <http://www.nmcsd.med.navy.mil>.



U.S. Navy photo by Mass Communication Specialist 2nd Class Joseph Eballo/Released

SAN DIEGO - Hospital corpsmen participating in the Tactical Combat Casualty Course at Naval Medical Center San Diego treat casualties of a simulated improvised explosive device, Oct. 28. The three-day course is intended to familiarize hospital corpsmen with tactical medical evaluation and care in a field environment under fire. The course is held in conjunction with the NMCS D Operational Medical Symposium.



U.S. Navy photo by Mass Communication Specialist 1st Class Anastasia Puscian/Released

SAN DIEGO - Navy medical personnel provide emergency life saving procedures to a simulated patient during Naval Medical Center San Diego's Operational Medical Symposium training exercise, Oct. 28.

Naval Hospital Bremerton supports MRIs in theater

By Douglas H Stutz, Naval Hospital Bremerton Public Affairs

BREMERTON, Wash. – Naval Hospital Bremerton magnetic resonance imaging technologists immediately answered the call in October for advanced technology help by sending complex examinations protocols and related instructions to the Marine Base located in Helmand Province.

“The NHB Radiology team was instrumental in assisting us in getting our MRI machine ready for patient care and they are directly supporting our Soldiers, Sailors and Marines who are deployed in theater. We could not have gotten to this point as quickly as we did without their assistance,” said Cmdr. Peter Lundblad, officer in charge of the Concussion Restoration Care Center (CRCC) on Camp Leatherneck.

The MRI is an advanced imaging machine that uses radio waves and magnetic fields to produce images in a non-invasive way by internally scanning for such wounds as concussions and brain injuries, as well as tissue, organ, bone and ligament damage. Lundblad contacted NHB for assistance soon after the MRI machine arrived at Joint Operating Base Camp Bastion Role 3 hospital.

“This center is designed to care for concussions, currently the number one most common combat related injury and non-surgical orthopedic patients, the top non-combat related injury,” said Lundblad, NHB Family and Sports Medicine physician, and Monticello, Minn. Native.

In the concussion clinic’s first year (August 2010 to September 2011), the clinic saw over 700 new concussion patients.

“The MRI protocols, safety documents, standard operation procedures and screening forms are absolutely essential to the establishment of a safe and effective MRI program,” explained Lt. Cmdr. Mark M. Morton, NHB Radiology Department Head. “An MRI scanner without appropriate examination protocols is like a computer without an operating system - it just does not work.”

“I was able to successfully send our exam cards (protocols) over to the technologists for use on their system in Afghanistan,” said Matthew Hodgson, NHB Radiology MRI



Courtesy photo

HELMAND PROVINCE, Afghanistan - Cmdr. Peter Lundblad, officer in charge of the Concussion Restoration Care Center on Camp Leatherneck, pauses in front of the opening to the new MRI system designed to care for concussions. Lundblad is working with radiologists at the Joint Operating Base Camp Bastion Role 3 Hospital to use the MRI system to immediately evaluate and treat mild traumatic brain injury patients instead of having to send them to a similar advanced imagery unit located days and thousands of miles away.

technologist. “They can download them and run them without having to go through the trouble of building a database from scratch.”

Hodgson also noted that using an MRI is a complicated process. “It’s a lot more than just putting a patient on the table and then pushing the buttons.”

Having the MRI system in camp gives immediate availability to evaluate and treat mild traumatic brain injury (MTBI/concussion) patients where in the past the closest MRI was days away at Landstuhl Regional Medical Center, Germany. “The MRI helps guide further evaluation and treatment of MTBI patients with the capability to expand to musculoskeletal/orthopedic injury evaluation,” said Lundblad.



Note: Forensic toxicology submissions shift to new facility

As part of the Armed Forces Medical Examiner System’s move to Dover Air Force Base, Del., effective Nov. 1, 2011, all samples for Forensic Toxicology testing must be sent to the following address: Division of Forensic Toxicology, Armed Forces Medical Examiner System, Building 115, Purple Heart Drive, Dover AFB, DE 19902.

The Guidelines for the Collection and Shipment of Specimens for Toxicological Analysis and the Toxicological Request Form located on the AFMES Web site (www.afmes.mil) has been updated. Please be sure to use the updated

form when submitting specimens for testing.

In addition the following e-mail addresses within the Forensic Toxicology Division have changed:

The new contact email for the Postmortem and Human Performance Laboratory is: afmes.forttox@amedd.army.mil

The new contact email for the DoD Drug Testing Quality Assurance Laboratory is: afmes.forttox.dodqa@amedd.army.mil.

Anyone who has questions regarding these changes can contact the Division of Forensic Toxicology at 301-319-0100.



View more Navy Medicine photos online at:
www.flickr.com/photos/navymedicine/



Navy Medicine studies jet fuel, hearing loss

By Lt. Pedro A. Ortiz, Naval Medical Research Unit Dayton

DAYTON, Ohio - Hearing loss is one of the most prevalent service-connected disabilities for veterans of the armed forces, with noise-induced hearing loss being a major military operational health hazard. Although widespread hearing conservation measures have been adopted, noise-induced hearing loss is as high as 20-30 percent in the military.

Noise exposure standards have historically been based on the range of human auditory sensitivity and exposure duration; however, recent research has established that simultaneous and even successive exposure to noise and specific chemical agents, including those found in jet fuel, can potentiate noise-induced hearing loss or produce additive effects.

In a project funded by the Air Force Surgeon General, researchers from Naval Medical Research Unit – Dayton (NAMRU-Dayton) at Wright Patterson Air Force Base, Ohio, the Air Force 711 Human Performance Wing/RHPBA and the Memorial VA Medical Center collaborated to determine whether there is an association between jet fuel exposure and noise-induced hearing loss. The studies exposed rats to non-damaging “white” noise and jet fuel, both separately and in combination. While neither noise nor jet fuel alone had a significant effect on auditory function, significant dose-related impairment of auditory function was observed in rats co-exposed to noise and a high dose of jet fuel.

Although the studies were performed with Jet Propulsion (JP)-8, they will likely need to be expanded to JP-5, as well as the new battery of alternative jet fuels awaiting approval for



U.S. Navy photo by Mass Communication Specialist John Suits/Released

AT SEA - Shooters launch an F/A-18F Super Hornet from a catapult during flight operations aboard the aircraft carrier USS Theodore Roosevelt (CVN 71).

military use.

Collectively, these results will allow a more accurate evaluation of exposure standards for the co-exposure of jet fuel and noise. This in turn will lead to significant savings due to decreased health care costs and the retention of specialized personnel, as well as savings due to reductions in long term health care and support for those leaving military service.

NAMRU-3 celebrates 65 years of infectious disease research

From U.S. Navy Bureau of Medicine and Surgery Public Affairs

CAIRO - The U.S. Naval Medical Research Unit No.3 celebrated 65 years of service in infectious disease research in Egypt, Oct. 20.

An event celebrating the anniversary was held at the NAMRU-3 facility with a host of guest speakers from the Naval Medical Research Center, the Egyptian Ministry of Health, the U.S. Embassy and the World Health Organization.

Navy Medicine established a presence in Egypt in 1942 as part of the U.S.

Typhus Commission tasked with reducing the impact of a typhus epidemic among troops and refugees during World War II. The success of this collaboration between the Navy and the government of Egypt led to the formal establishment of NAMRU-3 in 1946 to continue scientific partnership in infectious disease research.

-Capt. Robin Wilkening, commanding officer, NAMRU-3

cal service corps officers are dedicated to preserving and promoting health and wellness around the world,” said Capt. Robin Wilkening, commanding offi-

“There is none with a prouder history or more impressive list of accomplishments than NAMRU-3.”

cer, NAMRU-3. “One of the ways Navy Medicine achieves these goals is through the work of its overseas medical research laboratories. Of these, there is none with a prouder history or more impressive list of accomplishments than NAMRU-3.”

In the beginning, researchers focused on activities in Egypt and neighboring countries, but in recent years they have expanded activities in the Middle East, Sub-Saharan Africa, Eastern Europe and Central Asia. NAMRU-3 personnel and scientists routinely collaborate with regional research groups in the fields of disease surveillance, vaccine development and vector control for tropical diseases. They also train local scientists in areas of

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Got News?

If you'd like to submit an article or have an idea for one, contact MEDNEWS at 202-762-3160 or Valerie.Kremer@med.navy.mil

“Gaming” the system: Study looks at standards for small-arms waivers for patients on antidepressants

By Naval Center Combat and Operational Stress Control
Public Affairs

Can a video game influence Navy policy? Cmdr. Rob McLay and Lt. Cmdr Heather Kurera, psychiatrists at Naval Medical Center San Diego, think so. With the help of researcher Mas-soud Nikkhoy of the Naval Center for Combat and Operational Stress Control, the study seeks to provide data to determine the effects of Selective Serotonin Reuptake Inhibitors – commonly known as antidepressants – on a Sailor’s ability to safely use small firearms.

Current Navy policy states that no Sailor being treated with SSRIs may carry a firearm or deploy unless granted a waiver by a psychiatrist. “A couple of years ago, we realized we had no objective standards for when it is – or is not – appropriate to grant such a waiver,” says McLay. He conceived of the study and then brought it to Kurera, who now serves as principal investigator.

The study plans to enroll at least 100 participants through two phases of testing – before and after the administration of SSRIs. Each session consists of two tests: a Palm Pilot-administered measure of reaction time, concentration and judgment (Automated Neuropsychological Assessment Metrics, or ANAM), and – the fun part – a video game called Lethal Enforcers, in which participants use a plastic light pistol to shoot foes– and avoid shooting friends–as they appear on screen in such different scenarios as target practice, a bank robbery or a getaway.

While the SSRI study is cutting edge, the video game itself decidedly is not. Lethal Enforcers is played on a 15-year-old Sega Genesis system. Compared to contemporary games, Lethal Enforcers looks comically outdated. There is, however, good reason for using the Sega Genesis instead of its modern contemporaries.

For one, use of an outdated game significantly decreases the likelihood that participants would have played the game at home – eliminating learned skill as an unwanted variable in the study. More importantly, the older technology is actually more accurate for this particular scenario.

Research

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medical research and dealing with public health challenges.

H.E. Anne Patterson, U.S. ambassador to Egypt, thanked NAMRU-3 for the command’s commitment to Egypt. She said NAMRU-3 has continued to exemplify the best in collegial partnerships

as it strives to counter infectious disease threats in Egypt, the eastern Mediterranean region and afar with the help of the Egyptian government and its people.

According to Vice Adm. Adam M. Robinson, U.S. Navy surgeon general and chief, Bureau of Medicine and Surgery, medicine builds bridges, builds trust and fosters cooperation.

The lab is currently supporting force

health protection in the Horn of Africa, working closely with the Egyptian Ministry of Health and WHO, helping Djibouti with disease surveillance, responding to disease outbreak in Yemen, fighting malaria in Liberia, conducting joint research with Ghana, and studying diseases in the Republic of Georgia.



Courtesy photo

A Sailor plays the video game, Lethal Enforcers, during the SSRI small arms study. While playing the game participants use a plastic light pistol to shoot foes, and avoid shooting friends, as they appear on screen in such different scenarios as target practice, a bank robbery or a getaway.

“The newer technology won’t let you use a light gun,” says McLay. “When you use a Nintendo Wii, you’re using a motion sensor, which may or may not be lined up with where the gun goes so you can’t really test the same way in terms of ‘aim-shoot’ on an accurate target on the newer systems.”

The Sega, if all goes as planned, will be replaced by more realistic simulators as a part of a larger study.

“Right now, we’re just trying to provide preliminary data on these issues,” McLay says, and eventually, no simulators at all because his hypothesis imagines that the psychiatric symptoms themselves will predict performance in firearm use.

“The neuropsychological measures will be used as a surrogate for the actual firearms performance,” he adds. “In other words, we’re not thinking that down the road every psychiatrist will need to use simulators.”

“Firearm use really boils down to reaction time, impulse control and hand steadiness. These traditional psychiatric measures should be able to predict your ability to shoot straight — and shoot the right people.”

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