



GulfNEWS

A bimonthly newsletter serving the interests of Gulf War veterans

DoD reissues report on demolitions at Khamisiyah

By John Slepetz
Public Affairs

In a newly released version of its 1997 investigative report, the Defense Department reaffirms that more than 100,000 American Gulf War veterans may have been exposed to extremely low levels of the chemical warfare nerve agents sarin and cyclosarin. The new case narrative, "U.S. Demolition Operations at Khamisiyah," goes into greater detail than the original report. Readers also get a first look at the updated, computer-predicted exposure hazard area that resulted when U.S. soldiers destroyed chemical warfare agent-filled rockets at the Khamisiyah ammunition supply point in southern Iraq.

"Khamisiyah is the defining event in our history of investigations," said Bernard Rostker, special assistant for Gulf War illnesses. "It was the primary cause of this office's formation in 1996. And, to date, the demolition there is the only Gulf War event we believe may have exposed servicemembers

to chemical warfare agents."

The most significant new information for Gulf War veterans is the remodeled exposure hazard area. Using improved weather models, as well as better source descriptions for the characteristics and quantities of the two chemical warfare agents involved, the DoD generated a new hazard area prediction for the special assistant's investigation.

The new hazard area appears very similar to the 1997 report, but there are some significant differences: for example, it is smaller and does not extend as far to the south of Khamisiyah as previously estimated.

"The original hazard area, or plume as we called it back then, extended well south of King Khalid Military City," said Rostker. "Now, KKMC sits on the southernmost border of the revised hazard area."

The implication for Gulf War veterans is that some personnel identified as possibly exposed in 1997 no longer fall into that category. Others previously shown in the clear back then are now within the new potential hazard area.

In 1997, nearly 99,000 servicemembers were shown to have been possibly exposed. The 2000 potential hazard area model indicates that nearly 101,000 personnel were possibly exposed, including approximately 66,000 veterans common to both models.

"We are in the process of contacting all affected veterans," said Rostker. "The number of veterans we will notify as possibly exposed will be approximately 100,000. It's important to emphasize two points. First, we're talking about possible exposures to very low levels of these nerve agents. While little is known about delayed effects from this low-level exposure, current medical evidence indicates that long-term health problems are unlikely.

"Second, regardless of whether or not your unit is, or was, shown in the potential hazard area, any servicemembers who suspect they are experiencing illness resulting from their service in the Gulf War should seek appropriate medical attention," said Rostker.

The development of the remodeled potential hazard area is discussed on page 3.
(See *Khamisiyah*, page 3)

Maryland university receives grant to research Gulf War illnesses

By Joan Kennedy
Public Affairs

The Johns Hopkins University has been awarded a federal grant from the Department of Defense to investigate possible causes of illnesses experienced by some Gulf War veterans. This new research project is one of more than 190 federally funded research projects valued at nearly \$175 million.

"The research projects are looking at the various exposures we know some Gulf War veterans experienced, such as smoke from oil well fires, pesticides, low-level nerve agent exposure for those around Khamisiyah in early March 1991, diesel fuel exhaust, various vaccines and medications, physical and emotional stress, not to mention different food and water," said Michael Kilpatrick, M.D., deputy director of medical outreach and issues in the Office of the Special Assistant for Gulf War Illnesses.

Despite all that has been done, Kilpatrick said there really is a need for more research, because past projects have not provided final answers on Gulf War vets' illnesses.

The study is being conducted by researchers at the Johns Hopkins University Hospital in Baltimore, Md. The research team, led by Peter C. Rowe, M.D., a professor at the Johns Hopkins University
(See *Research*, page 2)

Be prepared



DoD file photo

U.S. Marines deploy concertina wire to prevent infiltration of their encampment during Operation Desert Shield.

*From the desk of
Lt. Gen. (Ret.) Dale A. Vesser
Acting Special Assistant*



One of the most important lessons learned from the Gulf War is that the Department of Defense is not well structured to deal with the non-traditional issues that arise after every deployment. Building on these lessons learned, we will now also address health-related matters from deployments past, present and future. As our mission grows, we remain committed to serve Gulf War veterans and their families.

Over the past four years, we have followed presidential guidance to "leave no stone unturned" and while this mission is not completely done, we have reached the point where we must look to be proactive for the future. The transition to the Office of the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments is complete.

We apologize for the delay in getting this information to you, but this will be the last issue of *GulfNEWS*, as you know it. Those of you who are on our current mailing list will receive a copy of our new publication which will contain information about Gulf War-related issues for Gulf War veterans and those service-members continuing to serve. The new publication will offer insight and information on current deployments, family issues and health matters as well.

We will continue to keep our readers informed through our Internet web site, GulfLINK. However, we will launch DeploymentLINK in the near future to provide information that should be useful to you and your family members.

The open door policy first established in November 1996 will continue. We are interested in hearing what you have to say. You can write to me via e-mail at special-assistant@gwillness.osd.mil.

I ask for your support as we begin a new journey together.

Johns Hopkins to study Gulf War illnesses

(Research, from page 1)

School of Medicine, will investigate whether some Gulf War veterans who suffer from chronic fatigue might have a treatable medical condition.

Researchers will test for two medical conditions in Gulf War veterans — neurally mediated hypotension and postural tachycardia syndrome. Both conditions occur after periods of sitting or standing upright. Normally, in an upright or standing position, gravity causes blood to pool in the blood vessels of the abdomen, arms and legs. To allow a person to remain sitting or standing, the nervous system makes internal adjustments that keep a proper amount of blood flowing to the brain. When these adjustments are not effective, the result can be neurally mediated hypotension or postural tachycardia syndrome.

Symptoms vary from person to person, but can include fatigue, lightheadedness, headaches, nervousness, difficulty sleeping, muscle pain, trouble thinking, concentrating or remembering and a fast heart rate. If there is a further reduction in blood and oxygen flow to the brain, some people may feel faint or may faint. Several of these symptoms are similar to those experienced by Gulf War veterans.

The researchers want to know if these two conditions are unrecognized problems that might be causing the chronic fatigue symptoms some Gulf War veterans experience. They will compare three study groups of 47 individuals.

The first group will be veterans who deployed to the Gulf War and who report symptoms which can include fatigue, lightheadedness, headaches, nervousness, difficulty sleeping, muscle pain, trouble thinking, concentrating or remembering or a fast heart rate.

The second group will include veterans who deployed to the Gulf War but are not experiencing any symptoms. The last group will include Gulf War-era veterans who were not deployed. Study participants will complete a series of questionnaires and undergo a physical exam and a tilt-table test where participants will be asked to lie on a table that is gradually tilted to 70 degrees, almost the angle of standing. Participants are then tested for either an abnormally increased heart rate or an abnormal drop in blood pressure. The entire visit will take approximately four to five hours.

Additionally, researchers are hoping to draw a link between possible exposures to

environmental factors such as pesticides, vaccinations or infections Gulf War veterans may have experienced and neurally mediated hypotension or postural tachycardia syndrome. Researchers will also ask study participants about any family history of problems with regulating blood pressure to learn whether environmental factors or family history are associated with having neurally mediated hypotension or postural tachycardia syndrome.

The changes in heart rate and or blood pressure which lead to these symptoms cannot usually be found in a routine medical office visit. The symptoms are usually diagnosed by the tilt-table test.

The good news is that these conditions are treatable. Once patients have received the diagnosis, lifestyle adjustments and medications can help regulate blood pressure or heart rate. The study results will be provided to the participant's primary care physicians for follow-on treatment.

To be eligible for the study, participants must be no older than 50, and have served during the Gulf War at any time between August 1990 and July 1991. They must have persistent tiredness which is not explained

"The research projects are looking at the various exposures we know some Gulf War veterans experienced ..."

*Michael Kilpatrick, M.D.,
Medical outreach and issues*

by another illness, and which began during or after deployment to the Gulf War theater. They must also have other symptoms which began during or after that deployment, and which are not explained by another illness.

Study participants will need to provide the names, addresses and

phone numbers of their first-degree relatives — biological parents, brothers, sisters and children 18 or older — for the family history portion of the study. Family members will be interviewed by telephone about their medical history.

Travel expenses will be paid to and from the Johns Hopkins Hospital for those interested in participating in the study. For participants who are not well enough to travel unaccompanied, expenses for a travel companion are also covered. Participants will receive a \$100 stipend. Active-duty servicemembers participating in the study will receive \$50 per blood draw; only one blood draw per participant is anticipated. Each family member interviewed by telephone will also receive \$25 for participation.

For more information and an application, call toll-free (877) 800-9516 or visit the study's website at <http://www.med.jhu.edu/gws/>.

New Khamisiyah report provides greater detail than original

(KHAMISIYAH, from page 1)

tial hazard area can be traced to process improvement efforts that began three years ago. In 1996, then-Deputy Secretary of Defense John P. White and then-CIA Director John W. Deutch recommended an independent peer-review of the CIA computer modeling of Khamisiyah to ensure the best process. DoD requested that the Institute for Defense Analyses select an expert panel on meteorology, physics, chemistry and related disciplines for modeling review. A subsequent peer-review panel reviewed the DoD/CIA methodology and made recommendations for improvement. The Institute panel recommended using additional atmospheric models and data sources for modeling the Khamisiyah Pit demolition. The panel's recommendations were adopted in 1997 and used in the 2000 modeling efforts. In February 2000, the same independent peer-review panel evaluated and endorsed the 2000 methodology.

The resulting, peer-reviewed methodology now employs the Naval Research Laboratory's Naval Operational Global Atmospheric Prediction System and Coupled Ocean-Atmosphere Mesoscale Prediction System models; the Defense Threat Reduction Agency's OMEGA model; the National Oceanic and Atmospheric Administration's Global Data Assimilation System, the European Centre for Medium Range Forecasts; and the National Center for Atmospheric Research's MM5 model for global and regional weather modeling. These weather models are combined with the Defense Threat Reduction Agency's Second Order Closure, Integrated Puff model and the Naval Surface Warfare Center's Vapor, Liquid, and Solid Tracking model for dispersion



DoD file photo

The Defense Department completed a series of small-scale demolition tests on May 31, 1997, at Dugway Proving Grounds in Utah. These tests were conducted to better understand what happened when U.S. troops destroyed munitions at the Khamisiyah ammunition storage facility following the Gulf War in March 1991.

modeling. The old methodology used only one weather model and one dispersion model.

An independent peer-review panel stated in its published evaluation that the results obtained from the improved methodology would "still be on the conservative side; [that is], they are very likely overestimates of the dosages actually received by personnel."

"Our intent is to use the most inclusive result," Rostker said. "We know this means we've probably placed more units in the potential hazard area, but we would rather have our error be more inclusive – on the side of the veteran. The panel both endorsed our methodology and agreed that estimated exposures would be overstated. With that expert reassurance, we are confident that we're

providing the best information to Gulf War veterans."

The 2000 modeling improvements include revised meteorological models; reduction in the estimated amount of nerve agent released based upon new intelligence analyses and on-site inspections; new toxicity data for cyclosarin; inclusion of an atmospheric removal mechanism to account for settling and decay of the nerve agents; and updated unit location and personnel data.

The unit and personnel location data is the key to determining which units should be included in the potential hazard area. The U.S. Armed Services Center for Unit Records Research maintains two data sets on 885,000 unit locations in its database. The first is a registry of Gulf War veterans and the second is a registry of daily unit locations. The U.S. Army Center for Health Promotion and Preventive Medicine combined this location data with the 2000 hazard area modeling results to produce the graphic representations of unit locations included in the narrative. The graphics portray unit locations in relation to the potential hazard area. In the three years since the original narrative was published, continuous data collection from veterans and official sources helped fill in many of the location gaps that existed 1997.

"We now have a much more definitive database of unit locations than we had for the first effort," said Rostker. "That, combined with the new potential hazard area prediction, made for significant changes to our 1997 findings and we wanted veterans to know about these changes. That's the reason for releasing this update now."

(See Khamisiyah, page 4)

Specialized Care Program makes huge difference in veterans' lives

By Diana Berardocco
Public Affairs

Gulf War veterans who have participated in the Defense Department's Specialized Care Center say the program is making a big difference in their lives. The program is part of DoD's Comprehensive Clinical Evaluation Program, which expanded upon routine medical care of Gulf War veterans and provided a more systematic evaluation strategy modeled after the Veterans Affairs Gulf War Health Examination Registry. The Specialized Care Center, an extension of the clinical services provided through the CCEP, was established in 1995 to better address chronic and debilitating symptoms among Gulf War veterans. It is located at Deployment Health Clinical Center, Walter Reed Army Medical Center in Washington, D.C.

With most Gulf War veterans now either

retired or separated from military service, some veterans have expressed concern that the Specialized Care Center and the CCEP will be discontinued. This is not true.

Today, the departments of Defense and Veterans Affairs are institutionalizing the lessons of the Gulf War and are jointly taking steps to expand the clinical services available to deployed forces. The experiences after the Vietnam and Gulf Wars have shown that the post-deployment period is crucial for carrying out medical screening and evaluation and providing appropriate care for returning servicemembers.

"A significant number of people are having positive outcomes," said Michael Kilpatrick, M.D., deputy director, medical outreach and issues from the Office of the Special Assistant for Gulf War Illnesses. "The multidisciplinary approach demonstrates that the mind and body do work together."

Building on the lessons of the Gulf War, the DoD and VA are expanding existing clinical programs for post-deployment screening and evaluation. The departments are developing clinical practice guidelines to assist health care providers in screening and evaluating service members with health concerns following deployment. Specific treatment guidelines are also being developed to include veterans who have deployed world-wide. Described as an instruction book for physicians and patients within the DoD and VA, "clinical practice guidelines" are being developed to provide clinically driven assessments based on best medical practices and best available medical evidence of post-deployment symptoms.

These deployment health guidelines are currently in development, with pilot testing scheduled for summer of 2001, and will be implemented in the distant future, approximately 18 months.

Your ticket to the information highway — visit our GulfLINK web site at:
<http://www.gulfink.osd.mil>

Are you a Gulf War veteran (or know of one) with health concerns? Call the CCEP at:
1-800-796-9699

Anyone with information on Gulf War incidents should call the Direct Hotline at:
1-800-497-6261

Gulf War veterans seeking information on VA benefits of all types should call the Persian Gulf Helpline at:
1-800-749-8387

New Khamisiyah narrative offers update information

(Khamisiyah, from page 3)

The events at Khamisiyah first came into question several months after the war when Iraqi officials notified United Nations weapons inspectors that U.S. forces had destroyed chemical weapons there. Initially, intelligence analysts believed the Iraq report to be subterfuge. Understanding the events at Khamisiyah was also confused because not all agencies used the same name to identify the site. The CIA, for example, called it the Tall al Lahm Ammunition Storage Area. Eventually, U.N. inspectors confirmed the presence of chemical weapons at the site and intelligence cross-referencing established it as the location previously identified as Tall al Lahm.

In the immediate post-war period of March and April 1991, elements of the Army's XVIII Airborne Corps and VII Corps carried out a series of demolition operations to destroy hundreds of munitions bunkers, revetments and buildings located on the 40 square kilometer Khamisiyah site. Two locations — one a bunker, the other a storage pit — contained 122mm rockets filled with a sarin/cyclosarin nerve agent mixture.

Demolition teams were unable to identify any of the munitions at Khamisiyah as chemical weapons. Believing the munitions were safe

to destroy in a conventional manner, the teams rigged bunkers, pit and buildings with explosives and, in a series of operations over a month, destroyed nearly everything.

The contents of the critical bunker and pit were destroyed March 4 and 10, respectively.

An M8A1 chemical detection alarm sounded on the first day (March 4) and soldiers did don protective clothing, but subsequent testing with M256 chemical agent detection kits turned up negative results. Soldiers resumed normal operations without masks or protective clothing. Medical personnel reported that during and after Desert Storm, they observed no chemical warfare agent exposure symptoms or any other health problems. Later, a U.S. Army Inspector

General report stated that “no soldiers, civilians, or animals anywhere in the KTO [Kuwait Theater of Operations] showed any suspicious symptoms that might be associated with a chemical warfare agent release at Khamisiyah.”

“Nevertheless, we know today that chemical warfare agents were released at Khamisiyah and that many of our soldiers were possibly exposed,” said Rostker. “That knowledge prompted our original 1997 investigation and case narrative. What we

learned in the intervening years is reflected in the new narrative. It's a much better report and I hope anyone interested in learning more about this important event will take the opportunity to read it.

“Also,” he said, “as is our practice, this narrative is an interim report and the investigation remains open. If pertinent, new information arises, we want to hear it.”

The case narrative is posted on the Defense Department's Internet website, GulfLINK at www.gulfink.osd.mil/khamisiyah_ii and copies are available upon request.

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*Bernard Rostker,
the special assistant*



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Agencies assisting Gulf War veterans:

<http://www.afa.org/>
Air Force Association
1501 Lee Highway
Arlington, VA 22209-1198

<http://www.legion.org/building.htm>
American Legion
1608 K St., NW
Washington, DC 20006

<http://www.amvets.org/>
AMVETS
4647 Forbes Blvd.
Lanham, MD 20706

<http://www.ausa.org/>
Association of the U.S. Army
2425 Wilson Blvd.
Arlington, VA 22201

<http://www.dav.org/index.html>
Disabled American Veterans
807 Maine St., SW
Washington, DC

<http://www.eangus.org/>
Enlisted Association of the National Guard
1219 Prince St.
Alexandria, VA 22314

<http://www.fra.org/>
Fleet Reserve Association
125 N. West St.
Alexandria, VA 22314-2754

<http://www.mcleague.org/>
Marine Corps League
8626 Lee Highway, #201
Merrifield, VA 22031

<http://www.ngaus.org/>
National Guard Assn of the US
1 Massachusetts Ave., NW
Washington, DC 20001

<http://www.navy-reserve.org/index.html>
Naval Reserve Association
1619 King St.
Alexandria, VA 22314-2793

<http://www.navyleague.org/>
Navy League
2300 Wilson Blvd.
Arlington, VA 22201

<http://www.ncoausa.org/>
Non Commissioned Officers Association
225 N. Washington St.
Alexandria, VA 22314

<http://www.roa.org/>
Reserve Officers Association
1 Constitution Ave., NE
Washington, DC 20002

<http://www.troa.org/>
Retired Officers Association
201 N. Washington St.
Alexandria, VA 22314

<http://www.vfw.org/>
Veterans of Foreign Wars
200 Maryland Ave., NE
Washington, DC 20002

<http://www.vva.org/>
Vietnam Veterans of America
1224 M St., NW
Washington, DC 20005