



# GulfNEWS

A bimonthly newsletter serving the interests of Gulf War veterans

## Exposures at Cement Factory "Unlikely"

By Ivory Graham  
Public Affairs

On May 17th, the Office of the Special Assistant for Gulf War Illnesses released a case narrative assessing the presence of chemical warfare agents at an industrial area near Kuwait City. The narrative focuses on chemical alerts and soil samples taken from the area and examines events surrounding the incident. This investigation was undertaken in response to veterans' testimony and MITRE Corporation's draft report, "Iraqi Chemical Warfare: Analysis of Information Available to DoD."

"What makes the investigation doubly important is that we identified a number of lessons to be learned," said Dr. Bernard Rostker, the special assistant for Gulf War illnesses. "We know of more areas where improvements need to be made and we're working on making them."

On March 12, 1991, a 2nd Marine Division detachment investigated a possible Iraqi chemical weapon filling station. The team searched the area, known as the "cement factory" and although a negative chemical examination resulted, the team did find protective equipment and material that could be related to chemical warfare. Two Marine

Fox Nuclear, Biological, Chemical Recon vehicles alerted for possible chemical warfare agents along the perimeter.

Vehicle operators printed alert records from both vehicles, yet only one has been located. The existing report and interviews with the unit indicate the Fox identified a chemical substance, although not a warfare agent. According to eyewitness accounts, soil samples were taken and sent to the Army Chemical Research Development and Engineering Center in Edgewood, Maryland, for analysis by chemists. They analyzed the soil samples and noted improper packaging which may have allowed agents to dissipate. Nevertheless, their final conclusion was that no evidence of any known chemical warfare agent existed in the samples. Unfortunately, the Marines were never informed of the findings, so the unit maintained the factory as a possible chemical mine filling station.

According to James Curren, OSAGWI's lead "cement factory" investigator, the absence of a positive test result was the reason the individuals involved were not notified.

"In 1991, there were no real formal



The shadows of two CH-46 helicopters race across the desert near the King Faisal Air Base in Jordan where U.S. Marines from the 11th Marine Expeditionary Unit are providing air support for Exercise Infinite Moonlight '98. U.S. Navy photo by JO2 Charles Neff.

guidelines established for notification of sample results that did not identify chemical warfare agents," said Curren. "Had the samples tested positive for chemical warfare agents, the Marines should have been notified."

Analysis of the tapes provided information not (See *Cement*, page 4)

## 'Stress' Review Finds Gulf War Link Uncertain

By John Slepetz  
Public Affairs

The Department of Defense announced on May 19th the release of a RAND Corporation scientific literature review which researched the relationship of stress to illnesses experienced by Gulf War veterans.

"Stress: A Review of the Scientific Literature as it Pertains to Illnesses of Gulf War Veterans," is the latest report commissioned by the Office of the Special Assistant for Gulf War Illnesses. The report examines the historical body of scientific evidence relating to the effects of stress on health in the general population as well as specific studies of stress and Gulf War veterans.

The RAND authors identified 15 studies that evaluated the relationship between exposure to stress during the Gulf War and the development of symptoms of Post Traumatic Stress Disorder (PTSD). All 15 studies demonstrated a modest correlation between stress and PTSD. The correlation between stress and health problems was stronger in persons exposed to very high stress levels (such as actual combat, a SCUD missile attack, or graves registration duties).

Ten studies reported on the relationship between stress exposure

and mental health problems such as depression or anxiety. Most of these studies provided evidence of a modest correlation between stress exposure and psychological distress.

RAND researchers found extensive evidence of stress resulting in physical symptoms in the general population including depression, anxiety, fatigue, impaired memory and concentration, headaches, back and neck aches, gastrointestinal complaints, and breathing difficulty. One or more of these symptoms are prevalent in undiagnosed Gulf War illnesses. However, the studies that evaluated a link between stress exposure during the Gulf War and physical symptoms, such as headaches or joint pains, were too limited to draw definitive conclusions.

"The scientific record regarding the physical effects of stress on the human body is well established," said Bernard Rostker, the special assistant for Gulf War illnesses. "However, because the physical symptoms of stress are also common to many medical conditions, and because there are so many other factors involved, we cannot conclusively attribute these symptoms to stress alone."

The report subscribes in depth the stresses most commonly cited by Gulf War veterans in surveys taken before, during and after the war. Combat-related stresses were sometimes (See *Stress*, page 2)

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evident, but the stress of deployment itself was common to all that deployed.

"Combat certainly subjects individuals to stress extremes," said Rostker, "but often overreaction is the constant stress of family separation, strange environments and new routines that serve to elevate the baseline level of stress of deployed service members."

RAND also reports that a problem still exists with popular perceptions of stress. In many instances, stress as an explanation of poor health casts a stigma on the afflicted. There is also a perception that if stress exposure were assigned any role in the health problems of Gulf War veterans, a failure to vigorously pursue other possible causes would result.

"Our veterans are experiencing real symptoms and real suffering regardless of the cause," said Rostker. "We cannot ignore any potential sources of illness in our investigations and that includes the effects of stress."

RAND experts reviewing the literature included Dr. Grant Marshall, a clinical psychologist and an expert in psychometric evaluation and multivariate data analysis; Dr. Lois Davis, a health policy analyst and an expert in military medical readiness and mental health policy; and Dr. Cathy Donald Sherbourne, a medical sociologist and an expert in health outcome measurement.

This paper, as well as other RAND literature reviews, is posted on the GulfLINK website, at <http://www.gulfink.osd.mil>.

On May 17th, my office released the second annual report detailing our operational goals and accomplishments in 1998.

Our second year was a busy one. In addition to following hundreds of investigative leads and placing multiple reports in development, we released four case narratives and two environmental exposure reports covering topics ranging from depleted uranium and oil well fires to whether chemical warfare agents had been found in a storage tank at a Kuwaiti girls' school.

In the report, I have provided a review of the events that led to the establishment of this office and a brief summation of our first year's efforts. A second section provides a summary of our second-year activities and recaps the findings of the investigations completed.

In addition to focusing on possible exposure issues, the team continues to provide direct assistance to veterans and advance its outreach programs to improve dialogue between DoD and our veterans.

The men and women who were there on the scene are the best sources of information for our investigations so when the number of inquiries we received through the hotline declined, we began initiating contacts. We continue to maintain an open door policy with the media, veterans' groups, Congressional staff members and the newly established Presidential Special Oversight

### From the desk of Bernard D. Rostker Special Assistant for Gulf War Illnesses



Board. Beginning in March, we expanded our outreach efforts to include the 'total force' – Gulf War veterans, those on active duty, serving in the National Guard and Reserve, retired and separated service members, DoD civilians, family members and concerned citizens – at military installations.

One important advance in veterans' assistance highlighted in the report was the process developed for helping veterans identify and locate their health

records. This team helped veterans locate approximately 10,500 missing hospital records from the Gulf War that may provide important documentation to veterans filing claims with the Department of Veterans Affairs.

As I lead the team into its third year of operation, we will increase the focus on lessons learned while continuing the emphasis on communication, including additional installation visits.

While we continue to develop and maintain the world's premier military force, we must also carefully consider the consequences of today's actions on the long-term health of our service members. And though we have not found anything that links Gulf War illness to one specific exposure or incident, we continued to investigate and leave no stone unturned.

The complete annual report is available on GulfLINK, DoD's Internet website, at <http://www.gulfink.osd.mil>.

## Veteran Spotlight: Lucille Mitchell

By Austin Camacho

When you first meet Lucille Mitchell, you know she is a person filled with joy. You would never suspect she has a body wrought with pain. Her quest for answers never stops, and now, she has taken to guiding other suffering veterans, as well.

Mitchell works at the Walter Reed Army Medical Center in Washington, D.C., as coordinator for the Exercise and Behavioral Therapy treatment trial recently started by DoD and the VA to help Gulf veterans reduce painful symptoms. Mitchell knows that kind of suffering first-hand, though she never served in-theater herself.

The Gulf War found Mitchell halfway through an Air Force career. She had served three years on active duty before the reserves, completed her Masters in nursing administration and taught at a university in Virginia until recalled to duty in 1989.

"Most of the nursing managers and administrative people stayed in place, but our clinical people went forward into the Gulf."

Mitchell says the hospital took in a lot of Gulf veterans. Then, their illnesses seemed no different from any other conflict. Until one day, while putting up a small towel rack, she didn't have the strength to finish the job. She'll never forget that day in May of 1994.

"My body just felt heavy and weak," she says. "Then I had a rash that started at my ankles and went all the way up my body." Over time, her joints stiffened and the slightest touch filled her with pain.

"Even when I got sick I said – and this is what I think many Gulf veterans say – 'okay, this is a momentary thing. I can rise above it.'"

Soon her hair began to fall out and she couldn't close her fingers around objects. She struggled to climb short flights of stairs. Doctors had no answers, but Mitchell refused to give in.

"I was so vain. I would go to work early in the morning and I'd stay late because I didn't want anyone to see me."

Mitchell tested positive for Lyme disease, then didn't. After five months of piecemeal care, she went to Wilford Hall Medical Center in San Antonio where they cataloged endless problems including her stomach and gall bladder, burning sensations and headaches.

Always a spiritual person, Mitchell turned to the Bible. "When I read the 23<sup>rd</sup> Psalm, the key words were 'THROUGH the valley of the shadow of death.' I'm going THROUGH and He is with me."

After 31 days, even experts at Wilford Hall admitted they had no answers. Desperate for relief, she never gave up.

"I said, 'if it's to be, it's up to me.' I was looking for a research study because I knew my condition was unique. I was looking on the Internet one day and I saw information on the CCEP."

The Comprehensive Clinical Evaluation Program offers medical care phases to Gulf War veterans, many of whom were undiagnosed.

At first it seemed as if she was knocking on the wrong door. "I never thought of the Gulf when I got sick because I didn't go over there. But my symptoms were so profound, so different from anything before. I was always so strong, so healthy."

Convincing doctors she needed the program, she entered Phase I, in 1996, and quickly moved on to Phase II at Walter Reed. Even there, her symptoms were a mystery, so she moved on to Phase III. Mitchell says the therapists were just what she needed.

"First of all, they were listeners and there (See *Mitchell*, page 4)

# DoD, RAND Release Depleted Uranium and Investigational New Drugs Reports



**A soldier prepares sabot rounds.**  
Sgt. B. Cumper/Army

## *Review: No Evidence of Harmful Effects*

By Austin Camacho  
Public Affairs

On April 15, the Department of Defense announced the release of a RAND scientific literature review that indicates there was no evidence of harmful effects directly linked to depleted uranium exposures at levels experienced by Gulf War veterans.

The report, "A Review of the Scientific Literature as It Pertains to Gulf War Illnesses: Volume 7 Depleted Uranium," is the latest report commissioned by the office of the special assistant for Gulf War illnesses. The report responds to veterans' concerns that depleted uranium might be the cause of some of their illnesses.

The report states that there are no peer-reviewed published reports of detectable increases of cancer or other negative health effects from radiation exposure to inhaled or ingested natural uranium at levels far exceeding those likely in the Gulf. This is mainly because the body is very effective at eliminating ingested and inhaled uranium and because the low radioactivity of natural or depleted uranium means that the mass of uranium needed for significant internal exposure is virtually impossible to obtain. Large variations in exposure to radioactivity from natural uranium in the normal environment have not been associated with negative health effects.

Exposure to uranium at high doses can cause kidney problems. However, no increase in kidney disease has been observed in relatively large occupational populations chronically exposed to natural uranium at concentrations above normal ambient levels.

Researchers at the Baltimore Veteran's Administration Medical Center are following the group of Gulf War veterans with the greatest exposure to depleted uranium, veterans with embedded fragments. Although these individuals have an array of health problems, many of which are related to their combat injuries, researchers say, "To date no manifestations of kidney disease attributable to the chemical toxicity of depleted uranium have been found; neither do these individuals appear to have manifestations attributable to radiation effects."

RAND is a nonprofit institution with a long history of independent research. RAND had experts review the literature, including Dr. Naomi Harley, an authority on radiation physics, Dr. Ernest Foulkes, a heavy metal toxicologist, and Dr. Lee Hilborne, a pathologist. Their review encompassed literature relating to both radiation and heavy metal toxicity risks published or accepted for publication in peer-reviewed journals, books, government publications and conference proceedings.

This paper, as well as the RAND literature review on oil well fires, Stress, Investigational New Drugs and the Defense Department's environmental exposure report on depleted uranium are posted on the DoD website, GulfLINK, at <http://www.gulflink.osd.mil>.



**Soldiers in NBC defense gear.**  
Staff Sgt F. Corkran/Army

## *Deliberate Planning; Poor Implementation*

By Barbara Goodno  
Public Affairs

The Department of Defense and RAND announced on April 15th the release of a policy review concerning the use of investigational new drugs (INDs) during the Gulf War. In this review of the literature released by Special Assistant for Gulf War Illnesses Bernard Rostker, entitled "Military Use of Drugs Not Yet Approved by the FDA for CW/BW Defense," RAND reports on the topic of IND's use to protect military personnel in theater.

The report reviews the history of the Food and Drug Administration's "interim rule," an exception to the general requirements for informed consent of the participants taking an investigational drug; the deliberations between the Defense Department and the FDA in 1990, and litigation that followed in 1991; the actual Gulf War experience with pyridostigmine bromide and botulinum toxoid; and the work of the Presidential Advisory Committee on Gulf War Veterans' Illnesses.

The review thoroughly addresses the ethical question raised by the waiver of informed consent as authorized by the interim rule and analyzes subsequent issues identified by the FDA in its 1997 request for comments.

"We commissioned this scientific review of the literature because of the continuing concerns of veterans," said Rostker. "Some veterans believe the use of investigational new drugs may have caused their illnesses. During the Gulf War, troops received very little information regarding the use of investigational new drugs. The required record-keeping was poor and administration was inconsistent from unit to unit. This clearly is an area that required a closer look."

During the writing of RAND's review in 1998, the issue of authority for waiving informed consent was decided by legislation. Now, by statute, the president – with full knowledge of the relevant congressional committees – is the final authority for such waivers. RAND concludes that questions of implementation must now be clarified and notes that although policymaking in the shadow of war may involve careful deliberation, it is better to have an adequate policy in place beforehand. The policy needs to be broad enough to respond to a number of contingencies and yet narrow enough to avoid misuse or confusion.

RAND is a non-profit institution working to improve policy and decision-making through research and analysis. Its 50 years of experience and long history of working with the Department of Defense make the organization well qualified to carry out this type of research.

Literature reviews dealing with chemical and biological weapons, pesticides, pyridostigmine bromide, immunizations and infectious diseases are expected to be released next year. As each is released, it will be posted on GulfLINK.

*"We commissioned this scientific review of the literature because of the continuing concerns of veterans."*

-- DR. BERNARD ROSTKER,  
SPECIAL ASSISTANT FOR GULF WAR ILLNESSES

# Resources for Veterans

Your ticket to the information highway — visit our GulfLINK web site at:  
<http://www.gulflink.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 DoD Incident Reporting Line at:  
**1-800-472-6719**

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

(Mitchell from page 2) was the commonality of being in a group with similar problems. Then they taught us coping strategies.”

Over time, faith and the techniques she learned in Phase III, also called “the Specialized Care Program,” helped her live a more pain-free life. Then, just days before her medical retirement, she received a momentous phone call about a new job opening at Walter Reed.

When she heard about the clinical trial, she felt fated to be involved. “Even though we may not find the cause, if we can find a way to successfully treat these illnesses, then we can apply it to all the Gulf War veterans who are suffering out there.”

Mitchell now recruits and screens applicants for the trial. She knows some are more concerned with fixing blame than working for a cure, and she has some advice for them.

“Forget the negative stuff around you because the main thing is you want to get the care that you need,” she says. “Nothing else matters if you don’t have the strength to take care of your family, to do the things that let you enjoy life.”

Mitchell is hopeful that the trials will demonstrate types of therapy that benefit sick veterans, even though she knows it may be years before the results are known. She says she’s glad that she’s one veteran who has found a way to help others.

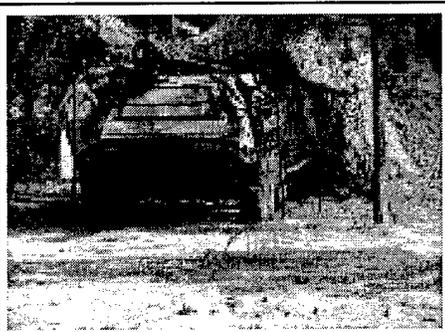
“If I can impart what we can do for them, and it ends up benefiting the veterans who are out there suffering,” she takes a deep breath, and shows a smile full of joy, “what could be more rewarding for me?”



**GulfNEWS** is an authorized publication for past and present members of the Department of Defense. Contents of **GulfNEWS** are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense, or the Special Assistant for Gulf War Illnesses.

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**UPDATE:** In our January edition, we told you about three states offering bonuses to Gulf War vets. We recently received a note that the URL published for Illinois changed shortly after publication. The new web address is [www.state.il.us/agency/dva/benefits/default.htm](http://www.state.il.us/agency/dva/benefits/default.htm)



Front view of a Fox vehicle from 51st Chemical, while at the Joint Readiness Training Center, Fort Polk, Louisiana. U.S. Army photo by Raymond Barnard.

(Cement from page 1)

available to the unit in 1991. After one of the Fox tapes was uncovered in 1998, the U.S. Army Soldier and Biological Chemical Command analyzed the tape. According to the chemical command’s assessment, the substance detected was probably xylene — a solvent which enters the atmosphere primarily from gasoline emissions — an assessment corroborated by the National Institute of Standards and Technology.

Evidence presented by the tape, the soil analysis, and the absence of casualties make a strong case that there were no agents at the site. However, since one Fox tape is missing and soil samples may have been packaged incorrectly, chemical warfare agents cannot be completely ruled out.

“Upon reviewing all available evidence, our investigators determined that the exposure of U.S. armed forces in the area must be assessed as unlikely,” said Rostker. “However, we have also identified a number of lessons to be learned. The narrative outlines the need for improvements in the areas of communication, sampling and evidence transportation.”

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