

**TEN YEARS AFTER: LESSONS FROM THE  
GULF WAR**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON HEALTH  
OF THE  
COMMITTEE ON VETERANS' AFFAIRS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED SEVENTH CONGRESS  
SECOND SESSION

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JANUARY 24, 2002  
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## **TEN YEARS AFTER: LESSONS FROM THE GULF WAR**

**THURSDAY, JANUARY 24, 2002**

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON HEALTH,  
COMMITTEE ON VETERANS' AFFAIRS,  
*Washington, DC*

The subcommittee met, pursuant to call, at 9:07 a.m., in room 334, Cannon House Office Building, Hon. Jerry Moran (chairman of the subcommittee) presiding.

Present: Representatives Moran, Miller, Boozman, Filner, Shows, Rodriguez, Snyder and Lynch.

Also Present: Representative Evans.

### **OPENING STATEMENT OF CHAIRMAN MORAN**

Mr. MORAN. Good morning. The subcommittee will come to order.

I welcome all of our witnesses and especially welcome my ranking member Mr. Filner back from California.

As Congress reconvenes in the new session of 2002, we are pleased to be here this morning to examine preventative procedures in place at the Department of Defense and the Department of Veterans' Affairs to protect the health care of our servicemen and women who have now been deployed in Afghanistan. The question we are here to answer is whether or not lessons learned from troop deployments during the Persian Gulf War have been integrated into the current deployment procedures of these Departments. We must take steps to ensure that these veterans have a healthy life when they return home.

Following the unspeakable acts of terror of September 11, the President admonished the Nation to prepare for a long struggle, a military and moral struggle against terrorism. On Monday, I witnessed the departure of 25 young men and women of the 388th U.S. Army Reserve Unit in my hometown of Hays, KS. I watched the sacrifice of these families who were forced to give up their loved ones to answer the call of duty. I watched the tears on the husbands' and wives' cheeks and the hugs of children on their father's pant leg.

Today's America's war on terrorism has truly come home. As we now look at the deployment of thousands—about 70,180 National Guard and Reservists have been called to duty for combat in Afghanistan and elsewhere, we should remember and learn from those who have served us in the past. America's veterans, many of them who are here today, have put their lives on the line to protect us during their active military service. I hope today's hearing will

be informative for everyone, will lead us to better solutions for the concerns that arose as a result of service that arose in Desert Storm, Somalia, Kosovo, Bosnia, and other recent military operations.

As the subcommittee with jurisdiction over the VA health care system and as a member of Congress with an interest, a strong interest in support of our military, we want this hearing to serve as a public record for our concerns about those being deployed in harm's way on foreign shores today.

We have distinguished witnesses with us here today to offer their views to the subcommittee, and we are privileged to have two former United States Senators who conducted reviews and investigations of the Gulf War veterans. We have current and former officials of DOD and VA to review the roles they played in the Gulf War and how policies were formulated to deal with known risks as well as to discuss some of the problems later uncovered that were not anticipated with that deployment.

We will review and hear testimony on current deployment. We will here how we have benefited from the knowledge gained by past errors. We will also hear from advocates of the Gulf War who will provide recommendations to ensure the health of our troops. We look forward to all of those testimonies.

I am closely following the work of the Gulf War. In Kansas, we have 7,500 Kansas veterans, and a study is ongoing. I look forward to my home State's recommendations in regard to what we should have learned from the Persian Gulf War.

I know that the ranking member, Mr. Filner, has taken a long and active role in regard to Persian Gulf War veterans and I would ask my very distinguished colleague, Mr. Filner, for any opening statement he would like to make.

#### **OPENING STATEMENT OF HON. BOB FILNER**

Mr. FILNER. Thank you, Mr. Chairman, and thank you for holding this hearing.

It is not only, of course, absolutely vital that we figure out what happened in the Persian Gulf War, and treat those who are suffering from illness, but, as we all well know, there is a high probability that our troops will be in the area again and if we haven't figured out what happened a dozen years ago, it seems that we are not adequately prepared for our present day active duty forces. So it is more than a decade after the 700,000 troops left the Gulf region, and we continue to look for the cause and to try to find a treatment.

It has been my experience, unfortunately, that both the VA and the DOD took a stance over the last decade which almost was predictable if you followed the situation with Agent Orange and some other issues. That is, both agencies said there was no such illness. It was just isolated problems, and there was nothing to be concerned about. When the cases multiplied, they took the stance, well, it is all in the person's head. There is really nothing here. It is all psychosomatic or psychological and again nothing to worry about.

Predictably, the testimony we will have today says how many great things each Department is doing, and I hope that they are,

but the testimony that I get on a personal basis and from people around the country, both those who suffer from illness and those who are trying to research the cause, finds that there is still a refusal to look at this clearly and fully, that somehow there is a defensive posture. Maybe the VA and the DOD should be the Department of Defensive Reactions, because there seems to be an unwillingness to look and to find the truth. And it seems to me, Mr. Chairman, that that is what national security demands most today: the truth.

So we will have some witnesses who will address, as you set up the hearing, Mr. Chairman, the lessons learned of the Gulf War illness. And of course we cannot forget our responsibility to those who suffer today and who still need treatment. We want to know how we applied the knowledge we do have to those veterans who are suffering, and what are the gaps of our understanding that might better help us to address the problems. I hope that the witnesses will address some of these issues and lead us to a path for a more effective response to this grave situation.

The figures that I have seen, Mr. Chairman, show that in the last 6 or 7 years the Federal Government has devoted \$155 million to 192 Persian Gulf War research projects, but none of them have identified concrete reasons for our Gulf War illness; and while Congress repeatedly has made it clear that we want to give veterans the benefit of the doubt, we still have limited or suggestive evidence of an association or the notation that additional research is needed. But the one thing that virtually everyone in both the scientific and political arena agree upon is there are tens of thousands of Persian Gulf veterans who are sick still with no definitive cause or clear protocol for their treatment, and we have to do better than we have been doing.

We have had, as the DOD and VA will suggest today, demonstration projects that have given us helpful leads. We are continuing to learn from that research, but I wish, in summary, Mr. Chairman, that both departments would take the stance that, "look, we don't know what is going on." It is clear that it is significant. Why not fund areas of research which for some reason both agencies reject before they even know what the outcome will be? There is a prejudice there. There is a defensiveness there. There is almost a roadblock that some researchers will testify to, that we should not have. We should be reaching out, grabbing hold of anything that looks like it might help because we don't know the answer now. So why not be open to far more risk?

I happen, as you know, Mr. Chairman, to have studied for 30 or 40 years the history of science, and I taught the history of science. My knowledge tells me that people tend to lock themselves into a given way of looking at things, a given paradigm, and refuse to look outside that system until confronted with so much evidence that their whole previous thought patterns break down.

We need to break down those thought patterns because we have not had the answer today. So let us look in all kinds of new directions.

Thank you.

Mr. MORAN. Mr. Filner, thank you very much. I again acknowledge your long-term commitment toward the Persian Gulf syn-

drome and your continued dedication to trying to resolve issues on behalf of those veterans.

Mr. Miller, any opening comments?

Mr. MILLER. Mr. Chairman, thank you.

I just want to say it is an honor to be here as a new member of this subcommittee, and I look forward to working with you and the other members.

As I traveled through the district upon returning home in December, visiting with many veterans in my district in northwest Florida, they seemed to be pleased with my assignment to the full committee and, most importantly, the subcommittee. I look forward to working with you and having you in the district. I would say to the veterans out there that we can do better, we will do better, and we certainly must do better.

Mr. MORAN. Mr. Miller, I welcome you to Congress and especially to this subcommittee. You are no longer the most junior member, however, of this subcommittee; and we welcome our newest colleague, Mr. Boozman. Doctor, welcome to this committee. We are delighted to have you and your expertise and interest in the welfare of our veterans in this subcommittee. Any opening statement?

Mr. BOOZMAN. Thank you, Mr. Chairman.

I also am very pleased to be here and hopefully with my background as a health care provider can be of some help to the committee. My district, the Third District of Arkansas, has a tremendous amount of veterans and, again, we are anxious to serve them and just anxious to hear the testimony today.

Mr. MORAN. Thank you very much.

Those of us who are not health care providers are rapidly becoming a minority as a group on this subcommittee, Dr. Filner.

It is my pleasure to invite to the table our first panel, Senator Rudman and Senator Riegle; and we are honored today by their presence. Senator Riegle was the chairman of the Banking Committee and in the 1990s led efforts to uncover causes of the Gulf War illness. Senator Rudman is a combat veteran of the Korean War and served as the chairman of the President's Advisory Board on the Persian Gulf War Illness.

We are delighted at the subcommittee that you would take the time and have the interest to share with us what we should have learned in the past and how it might apply to the circumstances we face today. Under the idea that we are going to be fair we were going to go in alphabetical order, but Mr. Rudman has pled his schedule so we will allow Senator Rudman to proceed. Thank you, Senator.

**STATEMENT OF THE HONORABLE WARREN B. RUDMAN,  
FORMER U.S. SENATOR FROM NEW HAMPSHIRE AND  
FORMER CHAIRMAN, PRESIDENTIAL ADVISORY BOARD ON  
PERSIAN GULF WAR ILLNESSES**

Mr. RUDMAN. I just asked Don if he would like to proceed me, and he said, no, you go first. I will certainly stay here until the committee has exhausted—I hope that is not the right word—the questions.

Mr. Chairman, Congressman Filner, distinguished members of the subcommittee, I am Warren Rudman, former United States



Senator from New Hampshire. I served as the chairman of the Special Oversight Board of the Department of Defense in investigations of Gulf War chemical and biological incidents from February 1998 to December of 2000. I appreciate the opportunity to testify here today.

Mr. MORAN. Senator, it would be helpful if you would pull the mike. I never interrupted a senator before. I apologize, but if you would pull the mike closer.

Mr. RUDMAN. Usually I keep it away for the opposite reason, but I will bring it up closer. Is that working right now?

Mr. MORAN. Thank you.

Mr. RUDMAN. All right.

The Gulf War revealed with great clarity the many shortcomings in the military's force health protection policies of that period. The undiagnosed symptoms that the ranking member has referred to in his opening statement, those symptoms that have prompted more than 12,000 Gulf War veterans to request disability compensation confronted the two departments with a problem to which they had no ready solution.

Several inquiries, culminating in the Presidential Advisory Committee on Gulf War Veterans' Illnesses, known more familiarly as the PAC, identified doctrinal weaknesses as well as the need for closer oversight of department investigations of potential exposures to chemical and biological warfare agents during deployment.

In response, President Clinton issued an Executive Order 13075 in February of 1998. It established the Special Oversight Board for Department of Defense Investigations of Gulf War Chemical and Biological Incidents. The President asked me to serve as board chairman. Former secretary of Veterans Affairs, Jessie Brown, served as vice chairman.

This independent Blue Ribbon Commission closely examined DOD investigations as well as the combined research efforts of DOD, VA, and HHS over a 25-month period beginning in November of 1998. The seven-person board included six veterans, two of flag rank, five of whom had served in combat. One board member served as a noncommissioned officer during the Gulf War. Another was the father of a Gulf War veteran. The board enjoyed the skills of a medical doctor and a Ph.D. in immunotoxicology.

This board presented two reports to the President describing the result of our oversight activity and our recommendations for improving force health protection. While I know the subcommittee focuses on lessons learned, please allow me briefly to state our major findings and conclusions.

We determined that the DOD, VA and HHS had developed by 1998—and we were prospective, not retrospective, by 1998. They had implemented a comprehensive research program to investigate the causes and potential treatment for the undiagnosed symptoms that afflict some Gulf War veterans. I cannot overemphasize the importance of ensuring the departments fund only meritorious, peer-reviewed projects. Efforts to fund projects that have not passed peer review do not serve the best interest of the Nation or its Gulf War veterans.

Let me depart briefly from my prepared comments to address a comment to Congressman Filner. I greatly respect your frustration,

how you feel; and we all somehow say, whatever comes over the transom, fund it. The problem is that, if you look very carefully at the submissions from around the research community in this area, there are many which obviously have great merit and others which obviously do not; and, frankly, Mr. Chairman, members of the committee, I don't know any way to do this fairly other than do it by a peer review of perfectly neutral, detached scientific experts. I don't think Members of Congress can say that is a good one and this one isn't, and there has been special funding and earmarking.

You know, as a former Member of the Senate, I understand those things. If people insist they are going to do them, fine, they have that right, but I believe it is in the interest of the veterans' community that a peer review board of extraordinary talent decide where these research dollars are going. Because, with all due respect, they are not unlimited, and we certainly didn't get involved in those selection processes. We made it clear, however, that we thought the DOD, VA, and others should do it in a very methodical way.

Let me state that yesterday the Secretary of Veterans Affairs appointed a special committee and a special scientific advisory board with some extraordinary people on it to make those selections. Our board believes that that is the way it should have been done. Science alone should determine whether a Gulf War syndrome or illness exists.

The board noted that no study, regardless of funding source or the nationality of the researcher, has been able to validate a specific cause linking it to a specific undiagnosed symptom that affects some veterans and members of the general public. That, I think is the single most frustrating part of our 2 years of work, that when we got done looking at every major study that was concluded, no one could point with any certainty to a specific cause linked to a specific disease. That, of course, is a challenge that this committee and the executive branch of the government continue to face today.

We confirmed that DOD had worked diligently from 1998 on to determine the extent and nature of the exposures to nonpersistent nerve agents released inadvertently during the destruction of Khamisiyah. The board agreed with the assessment that, with the exception of some special forces personnel operating covertly in Iraq, no American forces were exposed to chemical warfare agent releases resulting from the bombing campaign of the Allied air forces. DOD made great efforts to provide information to the public and to obtain firsthand reports from Gulf War veterans.

I do regret that the commitment of resources that we observed did not begin sooner. One of the problems was that by the time you got to 1997, 1998 and forward, a lot of the evidence was culled. And anybody who is a lawyer who has tried a case knows how difficult it is to deal with evidence which is culled, and we were going back and looking at events that had taken place 6, 7, 8 years before. So the certainty has a certain doubt cast upon it.

The board also noted the implementation of numerous initiatives to implement lessons learned from the Gulf War. We believe that DOD, VA, and HHS established the Military and Veterans Health Coordinating Board to better harness the three departments' efforts to enhance force health protection and ensure the well-being

of future veterans. We reviewed more than a dozen DOD programs to improve medical record keeping, collect pertinent health data, enhance medical intelligence—something that truly had been ignored prior to the Gulf War; we think that was very important—to implement environmental surveillance programs and address a number of other shortcomings that we noted on our report that existed during the Gulf War.

VA and DOD have begun the Millennium Cohort Study, which I am sure you are all familiar with, a multi-decade health study that will eventually involve 140,000 men and women to better understand the long-term effect of military service.

By law, our board terminated 1 year ago after fulfilling its mandated charter. There are two major reports, both on web sites, which your committee has in my statement. I want to refer you to the Department of Defense which can respond to the inquiries as to which of our recommendations, which were numerous, were acted on. They ought to be able to tell you to the extent they have implemented this board's recommendation, which, after all, it was a presidentially mandated board, and what other initiatives they have taken beyond those recommendations.

I would say that we noted informally that the exceptional readiness of units returning from deployment to Bosnia, Kosovo, Kuwait, Haiti and Rwanda clearly indicate improvements in force health protection that they have made since the Gulf War. More hard work remains, and I know that the subcommittee will assist in those efforts. I believe that you ought to look at each recommendation that is in our report and mirror that against what is going on today.

I appreciate the opportunity to testify here today. The one thing we can all agree on, veterans of this country deserve the very best from their government and we ought to ensure that we give them just that.

Mr. MORAN. Senator Rudman, thank you very much.

[The prepared statement of Senator Rudman appears on p. 64.]

Mr. MORAN. Senator Riegle, thank you for joining us. We are very anxious to hear your testimony.

**STATEMENT OF THE HONORABLE DONALD S. RIEGLE,  
FORMER U.S. SENATOR FROM MICHIGAN AND FORMER  
CHAIRMAN, SENATE COMMITTEE ON BANKING**

Mr. RIEGLE. Thank you, Mr. Chairman; and let me say, Chairman Moran, Ranking Member Filner and other members of the subcommittee, I appreciate the chance to testify here today. Even more, let me commend and thank you for your leadership, your concern and your perseverance in investigating the serious health problems that today face tens of thousands of Gulf War veterans and their families.

I want to say two things before going into my statement which you have copies of.

First, let me say I have great respect for my colleague, Warren Rudman. We served for a long time together. We worked together on a number of things, occasionally had differences of opinion. When we have them, we do it in an agreeable fashion. I think, as you will see from our respective statements today, we have quite

a different view of this problem, and I say that respectfully, and we can both speak from our involvement with it.

I want also to say that it is a great privilege to be back in the House. Prior to my 18 years of service in the Senate, I spent 10 years here in the House. I love this place. I admire and appreciate what you do each day. I think the job has gotten tougher over time, and so I consider it a privilege to be in this committee room and to be with you today to think about this problem.

I am going to be very frank in what I say. In my view, to this day our agencies of government have largely stonewalled this problem of sick Gulf War veterans, and I would lay out as a proof point right at the outset they are still out there and still sick, and we haven't done very much about it, about dealing with the sickness and to try to make them well. They were not sick when they went to the Gulf War. They got sick there and as they came back, and the responsibility I think is triggered by that train of events.

I think we have had a decade of very stubborn Defense Department denials on the reality and scale of this problem, and we finally saw just 1 month ago on December 11 a page 1 *New York Times* story entitled U.S. Reports Disease Link to Gulf War. I will read you the first paragraph.

Quote, After years of denying any link between illness and service in the Persian Gulf War, military officials said today that veterans of that conflict were nearly twice as likely as other soldiers to suffer the fatal neurological disease known as Lou Gehrig's disease—illness known as Lou Gehrig's disease. And the article, which I am sure many of you have seen—if you haven't, I have it here—you ought to read. Because if that doesn't take your blood pressure up because we have these kinds of things occurring, and the intense difficulty of digging out factual information about what even happened in the Gulf War that would have laid a foundation for this kind of pattern of extreme illness is something that needs to be examined today, and it would have been well if it had been examined right after the war.

Now, one can ask how we have lost a decade of time in the case of this article that I have just cited. Well, tens of thousands of sick Gulf War veterans have languished and suffered and are to this day. All the while our Defense Department has denied any linkage to the Gulf War and has failed in my view to invest any significant level of resources necessary to find medical answers that might make the sick vets whole again, and I will give you an illustration in a short period here.

I think the question arises, how does one maintain faith—I am talking about citizens, about mothers and fathers in this country—in a military command structure that is blind and indifferent to the persistent suffering and death of its own troops? I have talked to these veterans, as many of you have. They have been crying out for help and what they have often been told—and they will come here to testify and line up down the hall to say it—they have been told by the VA and others that the problem's in your head. Take some pills. In effect, go away. You are an embarrassment. We don't need you anymore. That is just as ugly as it has been and, to verify it, you only need to ask them or talk to their widows.

As was noted by the Chairman, nearly 10 years ago in the Senate and Banking Committee at the time when I was a chairman we did institute a major investigative effort into the probable causes of Gulf War syndrome and the likely exposure of our Gulf War military forces to biological and chemical weapons, and I have brought those documents here. You have them. I would ask that they, by reference at least, be made part of the record here in the committee. They were presented in the Congressional Record in full in 1993 and 1994.

That is part of the history, but it is vitally important today that Congress move swiftly now, especially since it is a virtual certainty that many of the biological weapons developed by Saddam Hussein were made with live disease-producing and poisonous materials sent to him from the United States to Iraq in the late 1980s under authority and approval of the U.S. Department of Commerce.

The list is here for you to look at today if you are interested. It includes anthrax, E. coli, botulism, West Nile virus and a number of others of the same sort.

What we have discovered then has fresh significance today, both to the legions of sick Gulf War veterans urgently needing medical help and support and the present danger of biological weapons exposure now to citizens here at home. Citizens right here in our Nation's capital have now been killed by weapons grade anthrax. The Congress itself has been targeted. It is critically important that we draw upon all the knowledge we have, yes, going all the way back to the Gulf War so that we can better protect our people both here at home now and also those in uniform in settings abroad.

While I brought these original reports here for your review today, I have copied key pages for your direct knowledge and reference during this hearing and, as you will see, they are attached to my statement. You will see that they summarize the conclusions of that earlier investigative work and document by date and type the shipments of dangerous biological materials from the United States to Iraq in years past. You may wish to discuss some of these items today.

(See p. 72.)

I would make four immediate recommendations for your consideration. There is much we can and should do regarding a large number of Gulf War veterans who are this very day experiencing severe health problems. You know and I know, we all know that many are desperately ill, living in poverty. Many others have died whose lives might have been extended. There is great human urgency to this problem. There would be if there were just one, but there are tens of thousands in this category.

So, first, I think we should initiate a full, independent medical review of each—and I mean each and every Gulf War veteran who is listed on a voluntary medical registry which at one point I know was up in the range of 130,000. Whatever help they need they should get it without further delay, and the Federal Government should pay every penny of the cost.

We spent a long time trying to get the budget balanced. Senator Rudman worked on that, I did and others, and we got it balanced. It is out of balance now, but if it is going to be out of balance, then some of the spending needs to go into this area.

Beyond these individual examinations, I think we have to catalogue the pattern of illness. We need to do a careful reconstruction of where each person was stationed during the Gulf War and do a systematic construction of patterns of illness tied to events, dates, places and likely exposures. I think these fellows that are showing up now and women showing up with Lou Gehrig's disease are one element of that, but there are a number of others.

I would say to you many of the veterans with whom I have spoken recall their experiences in the Gulf War very vividly; and, frankly, they are the best source of our information on exposures. If you were sick and you were over there and you went through a set of circumstances, might not your own observations be helpful for somebody to listen to and pay attention to and catalogue and put down with somebody else's? I think so.

We have spent too little time talking to veterans. We have talked to a lot of other people but not enough time talking to people who are sick and who have strong reasons to think and theorize why it is they are sick. I think we should talk to them one by one and actually listen to them to make a systematic determination of why they are sick and see if this information can guide us on how these Gulf War veterans can be best treated medically.

I want to make an analogy. When we have a plane crash in this country, what we immediately do is we set to work to reconstruct how the crash worked, and you have seen any number of pictures. We go and get a hangar, and we may tie up the hangar for 2 or 3 years. The plane goes down over the water. We send ships out and go into the water, retrieve everything we can. We reconstruct the airplane, where everybody was sitting, what happened. And if 150, 200, 250 people were killed, we try to do everything humanly possible to reconstruct what happened so we can prevent it from happening a second time.

We have over a hundred thousand sick Gulf War veterans. Now, is that any less important? Is it any less important for us to go back and do that kind of meticulous reconstruction? No, I don't think so.

But I can tell you this. The Defense Department has no interest in doing that. They are looking forward, not backward. And in this instance looking backward will help us do a better job of looking forward. So it is not just the obligation to the vets. It is the obligation to the security of the country, the veterans and now on the home front as well.

I think the Federal Government should welcome the responsibility and willingly pay these costs. The men and women who were asked to step forward and defend our country, they did, and now they have got to have from us the full measure of help that they need to try to save and repair their lives while that is still possible.

Secondly and very important, we need to determine exactly what biological and chemical weapons Iraq still retains. They had a huge arsenal. It is all documented. It is all in the formal report in the Defense Department at the end of the war. Then we need to prepare a strategy that can deal with and eliminate that threat once and for all. The same is true for other such stockpiles that may exist in the hands of would-be terrorists in other places.

Third, and very importantly, we need new military doctrines and better protective measures that will not put future U.S. Deployments in areas of biological and chemical weapons risk without proper safeguards. These safeguards have to include far better detection methods in war zones when these kinds of weapons may exist. We didn't even have any detection devices that would trigger on for biological exposures in the Gulf War. A lot of people don't know that. We did for chemical exposures, not for biological, even though we knew he had enormous capability in that area, and it was a great risk. That is why we had the chemical suits for people to put on if they thought they were needed. So we need to have that kind of capability going forward in the future.

Is the Defense Department developing it? Do they have it today? Those are questions that ought to be asked, and they ought to be answered. My guess would be no, but let us let the facts answer that question.

Another example is that during the Gulf War we had over 14,000 chemical detection warning devices dispersed through the combat zone. That is a lot of them. We spent a lot of money for those, I might say. Those alarms went off tens of thousands of times as the air war took place. They were just going off all the time. There were recordings that people did in real time. You can hear them. Some of you probably have. Amazingly, the Defense Department later claimed that each and every alert that sounded, each one was a false alarm.

I think, given all the documents that have been assembled, and we put a lot of it on the table, but there is a lot of other, proves that that is a patently false assertion, and they shouldn't be permitted to get away with it. It should not be allowed to stand. If it does, it is going to do several bad things, but it will continue to prevent the move to a new regime of proper safeguards that can actually offer the protection that our combat forces need today and in the future and that needs to be ramped up.

It is going to cost money. It is money well spent. We are spending money on a lot of things. We might as well spend it on something we really need.

If the best we can do with Lou Gehrig's disease that affects Gulf War veterans 10 years later is to finally say, in effect, well, sorry, we know it is a bit late, but here is your service-connected disability check. If that is the best we can do, then we really ought to hang our heads in shame.

Fourth, we also need full public disclosure of military contamination events if and when they occur. I documented some of those with our investigative team with people who were out there and actually did the tests in the field at the time in the Gulf War, turned in the records and the records disappeared. Where did they go? I don't know where they went, but the fact that the records disappeared does not erase the fact that the event happened.

So we need full public disclosure on these military contamination events when they occur and the response with the full medical resources of our country to meet the needs of any veteran who returns from a war zone sick from exposures while on duty. That means to me a full disclosure from the Defense Department when it comes to sick U.S. veterans. That requires a President, his Com-

mander-in-Chief and a Defense Secretary who will hold the officers at every rank to a standard of absolute truthfulness and transparency on these life-and-death matters. I believe President Bush and Secretary Rumsfeld are men who would want such a standard.

In the United States today our professional volunteer military force is trained to accept command orders and be ready to die in combat if necessary, and we have just seen that happen in Afghanistan. In return, we have got a corresponding obligation on the part of our government to use every available means to protect these fighting forces during combat and to enable them to cope with the aftereffects of combat and to try to return to a normal life.

Chemical and biological weapons risks can produce in veterans a form of living death. I have seen it, and you can see it and I am sure have seen it in talking to people who have gone through this circumstance, of lives broken forever by unseen wounds suffered in war time.

As we are now finding here on the home front with biological anthrax attacks, we must have new and better methods of protection. I think we must honor and protect these men and women within our armed services as they serve our country by equipping them with everything they need to stay alive and well. They are not so equipped today, in my view. I think when we fail that test, I think we dishonor them and we dishonor our Nation. I think we can and must do better, and hopefully this committee's work can lead us in that direction.

Thank you, Mr. Chairman.

[The prepared statement of Senator Riegle, with attachment, appears on p. 68.]

Mr. MORAN. Senator Riegle, Senator Rudman, thank you very much. I think we can use your testimony as a way to focus our efforts as we talk to the Department of Defense and Department of Veterans' Affairs officials, past and present.

I appreciate your remarks, Senator Riegle, about your service in the House. I notice that every senator reminisces about the good days in the House, but none of them ever return to join us back in this body.

Mr. RIEGLE. Well, Dale Kildee, who took my seat, is staying here forever, so if he decides to leave I may try to come back.

Mr. MORAN. I would like to ask you, the two of you, if you were on this panel or on the Senate and looking today at the issues that we are looking at, what would you suggest we ask as questions of the Department of Defense and Veterans' Affairs? It seems to me that our goal has to be—I guess we have to know what the questions are, but they relate to what are we doing today to prevent what happened in the past from occurring again. And it seems to me those issues very much are related to medical research, finding out cause and effect, what are we doing today to resolve the issues that the two of you—your testimony really points out some unanswered questions.

So how far along are we in medical research? What are we doing in regard to our vaccination program? Did we learn something 10 years ago in that aspect of service? What equipment safeguards do we have in place for our personnel? Do we have biological and chemical detection equipment in place in the regions that our mili-



tary men and women are now serving? Are we doing an adequate job of military screening upon deployment, during service, and upon return? And do we know specific locations in which our servicemen and women are engaged in combat today? Do we know where they are and when? Can we track that so that we can develop a potential relationship between contact or events with chemical and biological agents and location of our servicemen and women? And do we have the intelligence capability of determining where the stockpiles are, what kinds of agents are there, what the threat is?

I would just appreciate any response you might have about those items or others as we try to determine from Department officials what it is we are doing today and what could we do better.

Mr. RUDMAN. Mr. Chairman, I think in your question you have laid out a number of markers that have to be answered. A number of those very items are referred to in our two reports.

Beyond that, I think you owe it to yourself to look into it really as a stark contrast between what my colleague feels what has been going on in the research area and what I believe.

In fairness, Don Riegle's report is dated 1994 and 1995. I have read it, and it is a first-rate report, and I don't disagree with a lot that is in that report. I am going to submit to you I think things have changed since then. Why did they change? I think that the total pressure of the Congress, the veterans' community, by early 1995 that convinced people at the highest levels, whether it be the outgoing Bush administration or the incoming Clinton administration, that they had to do something different, and I think they have.

What I would say to all of you is take a look at our report or, if you wish, records your committee has on the Office of Special Assistant Gulf War Illness, Dr. Rosker at the time, listing every research grant. I think you will find they are done in the finest medical schools by the finest physicians and scientists trying to get the answer to what Congressman Filner stated in his opening question.

I will submit to you that these people did not engage in an unholy conspiracy to hurt our veterans. They are very good people from many of your States, if you will look at the medical schools that were involved in this research. They agree that these illnesses exist, but the frustrating part is none of them have yet, including with ALS, come up with a connection. Maybe there is a connection, but I am simply stating that I think what happened post 1998 is far different.

So what I think you ought to be doing is to be sure that the ills that my friend Don Riegle has talked about truly are changed and, if not, you ought to go in and make sure they are changed. If we are going to spend \$150 million next year on research grants or \$250 million, we ought to make sure it is being spent for the right people in the right place for the right reasons. So I think there is a difference in our view there.

Let me also add that you made one interesting point, and it was an interesting point that my friend Don Riegle made. I was appalled when I first got into this at the lack of knowledge as to where each infantry, armor and artillery unit was on a particular day.

Having served in the Korean War, having commanded a rifle company in the Korean War, I had to do a report, which is now in microfiche in St. Louis, Missouri, which I can pull out and find out where I was on July 1, 1953, the force structure, where we were and how many casualties. You couldn't do that. That has now changed. I believe you will find that the Army in particular has made major changes in its deployment protocol so you do know where people were. That was one of the problems that we had to deal with. People didn't know who was where and when in many occasions.

But I would commend you to the Khamisiyah report, created at a cost of a lot of money, which has done a pretty good job of answering some of the questions that Senator Riegle's report had. I do think all of these things that you mentioned, that he has mentioned, that are in our report, I think those are your marker questions for DOD and VA. That is where they are.

Mr. RIEGLE. I appreciate the questions and the chance to respond, and I will try to be brief in doing so.

The medical research route is part of the response that is needed, but we have a fairly simple and direct problem to face, and that is a lot of the veterans who came back sick from the Gulf War, who are dying before the research is done. And you can say, well, that is kind of the way it is. It takes a long time to do the research, and life goes on and so forth. I have known a lot of the veterans, and I am sure many of you have, who are sick and have since died. So they haven't made it to the end of the research.

I am not saying stop the research, but we can't take that and, in effect, hide behind the research. And I think there are some people in our government, in the executive branch of our government over the years that have done that. It is a great way to push the problem off into the future while people today need help today.

So I will make a very simple suggestion. I am going to make two that I think ought to be done, and I hope they make some sense to you. I think any sick veteran that we have from the Gulf War who went into the Gulf War healthy—and, by definition, people had to be healthy to get in—but came back and their health was broken, they deserve, in light of everything we know, in the mysteries and the research going on and the unanswered questions and now the answered questions on Lou Gehrig's disease and so forth, at least part of the answer, we should give them a presumption of a service-connected problem. We should provide them with service-connected compensation, and we should let them hold their lives together, give them a chance to buy some private insurance, if that is what they are compelled to have to do, but to get some help.

I mean, the reverse side of the coin is to say, look, we wanted you when you went into the Gulf War. You went over there, and you were healthy. You came back, and now you are sick. We can't prove why you are sick. There is a whole pattern of a lot of sick people from the Gulf War, but we can't pin down why you specifically are sick or why you specifically have Lou Gehrig's disease, and so we can't grant you service-connected disability. Now, they have just done that with respect to the people who have had Lou Gehrig's, but it's a long time later and you have got to eat and feed your kids every day. And in a budget of the size that this govern-

ment has today we are going to plead poverty because we can't meet the needs of sick veterans from the Gulf War? Shame on us if that is our answer.

I don't need to know precisely what specific cause it may have been. Whether it was the pretreatment situation, whether it was the oil fires, whether it was blowing up the chemical and biological weapons and scattering that stuff all over the place, the alarms going off. If somebody went over well and they came back sick, they deserve a presumption of service connection in this instance, especially now because we have got things that are killing people. So that is pretty straightforward.

Now, you know, we can get caught in the woods and we can get in a swamp on this thing and not get anywhere and sooner or later they will all die. I remember when people were trying to get an increase in the pension for World War I veterans, and people kept stalling and stalling in part because they kept dying off until finally there were hardly any left. So let us not do that here. I think we are better than that.

What kind of signal do we want to send somebody today to go into the volunteer military or maybe have to go into Afghanistan or back into Iraq, which is loaded with these weapons today? What kind of confident signal do we want to give them and to their parents? What if they come out sick? Are they going to get the same treatment that the Gulf War veterans got? I hope not. Or the same treatment that our Vietnam veterans got for so long on Agent Orange?

This is an old problem. This is a problem of institutional unwillingness to face up to problems that perhaps couldn't have been anticipated properly when the war was going on. Proper steps weren't taken. People got sick, and now some people want to walk away from it, and we can't permit that. That is not what America is about. We are not about walking away from sick veterans. At least I hope we are not.

Mr. MORAN. Senators, thank you very much. Mr. Filner.

Mr. FILNER. Thank you, Mr. Chairman.

I also would like to welcome to his first meeting Mr. Lynch of Massachusetts who replaced our beloved Mr. Moakley. We welcome you to the Veterans' Committee.

Mr. LYNCH. Very proud to serve on this committee and your remarks are heartwarming. Very good. Thank you.

Mr. FILNER. Thank you, Senators, for your testimony and service to our country. You don't know how delighted I feel, as one who started a Capitol Hill career as a legislative assistant to a senator, now being able to question you. That is a great feeling.

Mr. Rudman, just briefly, you used the Khamisiyah situation to show how diligently the DOD worked. I would draw an exact opposite conclusion. That is, at first, DOD denied there was any release of any of these materials. They just denied it, stonewalled in the words of Senator Riegle. Then they said, maybe something occurred. Well, maybe it happened at Khamisiyah. Well, but only a few people were affected, maybe a few hundred. Now it turns out maybe a hundred thousand were affected by Khamisiyah. So it took an incredible amount of teeth pulling to even get them to admit that.

By the way, I want to thank Congressman Evans, who is here with us now. He has been working on Agent Orange issues for so long and has asked questions that have come out with some of these answers; and we thank you, Congressman Evans.

You talked about peer review. I come from academia. I believe in peer review. The problem with peer review is that, as I said earlier, it doesn't allow any deviation from what is accepted. A peer review panel in the 17th century wouldn't have funded any research that presumed the sun and not the earth was the center of the universe. By definition, peer review only accepts (in a "neutral," "unbiased" fashion) what people at that moment think is reasonable.

I don't want to abolish peer review, but I think there ought to be an amount of money set aside for wacky ideas, ideas that don't conform—

Mr. RUDMAN. How would you write that, sir?

Mr. FILNER (continuing). Ideas that don't conform to the accepted paradigm. Because I believe that some scientists from very established and renowned institutions such as you named have been denied research opportunities because they did not fit in with the accepted pattern. I would just say, since we haven't been successful so far, let us try something outside of what the peer review system gives us.

Mr. RUDMAN. Let me respond to the first part and then the second. Well, the second first. I don't have a problem with that.

If you literally want to write language that says unconventional research will comprise 10 percent of this appropriation, so be it. I mean, it might turn something up.

On Khamisiyah, I think we agree. What we are saying is that, as our board came into being in 1998 and was given a proactive role in dealing with DOD on a number of things that it had been doing, we had a major influence I believe in getting these things reordered and restructured. I don't disagree that up until that time there had been a lot of stonewalling.

My point is I think Dr. Rosker, who is, I am sure, back in California enjoying life after a very tough job for 4 years and he is a scientist—

Mr. FILNER. Stonewalling is tough for 4 years.

Mr. RUDMAN. He changed a lot of things for the better. I know a lot of veterans' groups don't agree with that, but I believe he was trying to get to the bottom of it.

Incidentally, if you look at our report, you will find meticulous review of about 35 reports line by line of what we did. You might want to look at it.

Mr. FILNER. I thank you for the service you have done in this regard.

Senator Riegle, as you might guess, I agree with your statement. I would just add a little bit to your recommendations. I would like your reaction to this. As you point out, very accurately, we knew exactly what the Iraqis had in the form of biological and chemical warfare because we gave it to them. It would be very irresponsible if we were not also working on potential antidotes to these things which we knew they had, and it may be that the problem lies with those antidotes which were being tested or were given in the

vaccination program to our armed forces. When someone asked DOD for the record of vaccinations, they said “we didn’t keep them.” That can’t be. It just cannot be.

I believe that it’s possible that something in those inoculations or vaccinations or injections either were not tested properly or were coming with the wrong information and may have been responsible for some of this. There are some theories about that, and I would just add to your recommendations where you talk about independent medical review and full public disclosure that we ought to add a complete examination of what went into this vaccination program.

When the DOD tells me they don’t have those records, that is a lie, and it leaves me to think they are trying to cover up something. If friendly fire caused Persian Gulf War illness, that is, something we did, we need the truth. Because we are sending men and women into the same situation and, as you know, people have faced court-martial rather than take the anthrax vaccine because they had evidence that it may cause problems. I wouldn’t take the anthrax vaccine even if I was in one of the contaminated buildings today. I don’t trust it. But do you have a comment on that?

Mr. RIEGLE. If I am not mistaken, and correct me if I am, didn’t I just read or hear that an advisory has gone out to women in the armed services who may be expecting a child, not to take this? If you just take that fact, what does that tell you? There has to be some body of understanding or concern that says, you know, you could have a bad outcome here; there could be a problem here.

The issue of birth defects and birth issues in the families of returning Gulf War veterans is another huge hidden issue, and if you want to have a panel that will stand your hair on end, bring in the spouses, particularly the wives of men who served in the Gulf War, and let them tell you about the medical problems they have developed and that their children have developed——

Mr. FILNER. And their pets.

Mr. RIEGLE (continuing). Since their husbands have come back and let us have somebody explain why we have got that burst of odd pattern and circumstances. The fact is, we haven’t.

But, to your larger question, I would like to refer you to the attachment to my statement that, if you will take a look at it on what is numbered page 37 on the attachment which comes from our Senate report of—back in the 1990s, and I want to just cite this one paragraph because it goes straight to what so much has been said here today. It is at the top of the page, and it comes from the Department of Defense’s own report to the Congress on the conduct of the Persian War.

As Warren Rudman says, the military, when it wants to, can keep very good records. I think it is also very good at losing records when it feels it needs to lose records. But, in any event, they wrote this and signed their name to it. So I think this has to be seen in that light. It was released in April of 1992, but this has a bearing on where do we stand today and what threat do we face tomorrow whether in Washington or in Iraq or some other place.

The quote is this: “as you will see”—this is the Department of Defense talking—” by the time of the invasion of Kuwait, Iraq had developed biological weapons. Its advanced and aggressive biologi-

cal warfare program was the most advanced in the Arab world.” Some lines missing here. “The program probably began in the late 1970s and concentrated on the development of two agents, botulism toxin and anthrax bacteria. Large-scale production of these agents began in 1989 at four facilities near Baghdad. Delivery means for biological agents ranged from simple aerial bombs and aerial rockets to surface to surface missiles.”

Now, as you say, much of this was known before the war, and that is why some protections were taken, I think grossly inadequate, and that is part of the embarrassment that the Defense Department has today. One of the reasons they don’t want to talk about this is it is a very untidy part of the war, that that part wasn’t planned and carried out properly. They didn’t anticipate a hundred thousand plus sick Gulf War veterans, and nobody wants to accept responsibility for it. They want to be able to classify it as a clean and quick war and an efficient war, and if you have got a hundred thousand sick Gulf War veterans, that is a problem. So it is a problem that a lot of people don’t want to talk about in the Defense Department.

But this was what was known at the time, and that threat presumably exists today, and we had better pay attention to it, how we protect against it in Boston or Washington or anyplace across America. Or if we find ourselves reengaging in Iraq, are we going to do it the same way that we did it the last time? I hope not. Because, if we do, we are going to have a lot of sick veterans coming home from a new Iraq war because of, I think, exposures to biological and chemical residues that get scattered around in the course of a bombing campaign such as we had before.

So that would be my view.

Mr. MORAN. Senators, thank you. Mr. Boozman.

Mr. BOOZMAN. I would like to ask Senator Rudman, with the Agent Orange experience it really took a long time to establish there was a cause and effect there. I think with smoking it took years for the medical community to actually say there is a cause and effect here. Yet the public, the doctors that were dealing with the problem had the gut feeling that there was something here much sooner than that.

I guess I would ask—you have studied this area extensively and are a neutral person. Do you have a gut feeling as to some areas—I think in your statement you said that Congress doesn’t need to decide what areas are researched, and I agree with that. Sometimes, though, there are other interests involved in research and that is not always determined in the right venue. I guess, as an outside observer, do you have a gut feeling in any of the things that you have come across as to cause and effect?

Mr. RUDMAN. I do and I don’t, and let me tell you why I answer it that way. I don’t know if any of you are aware of this or not. I think some are. One of the members of our panel who is, unfortunately, the deceased former Chief of Operations, Bud Zumwalt, Admiral Zumwalt was the one uniformed man in America that fought for American veterans on Agent Orange. So we had the benefit of his sitting literally next to us until several months before we completed it and he unfortunately passed away. I talked with him on this very issue that you just asked me.

Here is the difference. We have so many problems in this veterans' population and with their families referred to as Gulf War illness. The symptoms are all over the place, from birth defects in babies that were born soon after that Gulf War to neurological problems, skin problems, intestinal problems, lung problems. Agent Orange tends to be more defined. Now, my sense is that something is wrong, but I don't know what.

Let us address what Don Riegle has said in a very direct way. I am sitting here with him, so I can do that.

What he is essentially saying to you, and he may be right, what you as a Congress have to decide is whether we ought to have no-fault veterans disability for people coming home sick.

Mr. RIEGLE. From the Gulf War, if I may say.

Mr. RUDMAN. Of course. From the Gulf War. Because it is so complicated and there is so much dispute about it, if you went and you are sick, you are covered. That means turning the whole VA system in this country upside down, but you can do that.

Mr. RIEGLE. Is it upside down or right side up?

Mr. RUDMAN. Whichever way you feel. But the issue is, do you want to do that? It may be the only way that you can ever satisfy people who have deep concern about this issue. And I am not going to sit here and say it is right or it is wrong. A few years ago, I would have had to take a stand, and right now I don't, and I don't know how I feel about that.

But we are talking about something that, as you say, we are having a terrible time defining. Do we want to say as a Nation, if you are deployed to the Gulf and you come back here and you got ill and you progressively get worse that we are just going to say we take notice of that, you don't have to prove it? All you have to prove is that you are sick, and if you have—and you were in the Gulf, we will give you some sort of disability.

Maybe that is what this Congress will end up doing. I don't know. But it seems to me here are the two ends of this debate. And you ran for this office. You decide.

Mr. MORAN. Mr. Evans—we have the ranking member of our full committee with us, and I am delighted that you are here and again acknowledge, as Mr. Filner did, your active interest and commitment to this topic, and we would welcome any questions you have of the witnesses.

Mr. EVANS. Thank you, Mr. Chairman. I thank you for the opportunity to speak.

Not to date yourself, Senator Riegle, but I read your book in college and enjoyed it.

Mr. RIEGLE. Thank you. I am glad it didn't scare you away from running for Congress.

Mr. EVANS. I think that the veterans of this country owe you a great degree of gratitude for initiating your investigation. We followed it closely here, and we appreciate your work when no one else was willing to take this on.

And of course we thank you, Senator Rudman, for your continued help to us.

I agree more with Senator Riegle about what I think happened there, but the one thing that bothered me the most was, you know, I am a former Marine. What would be the motive for the Federal

Government to basically get rid of this problem by sweeping it under the mat? I didn't think that the—obviously, it could not have been a nationwide program to deny people of their benefits, but do you have any idea of why our government would want to hide either the Agent Orange problems or the problems of the Persian Gulf veterans? Do you have a theory about that at least?

Mr. RIEGLE. I do, and if I may answer first.

First, let me thank you for your leadership on this over a long period of time. This is not an issue that has necessarily attracted a lot of attention, and it needs a lot of attention, and I appreciate the effort you have made and others to get the bright light on this to see if we can't help people.

I think there are some other reasons. You have to theorize a bit. I have seen a pattern of this in our government over a great length of time.

You have mentioned not facing up to the problem of Agent Orange in the Vietnam War. That is quite apparent. But we also did atomic testing in civilian areas, and people were contaminated, and they got sick and many died and got cancers and so forth. The data was in the government, and the government suppressed it for years and years and years. So there are other powerful examples in this past century where our government has done things, presumably inadvertently, that have killed people or caused great medical harm, and I think there is always a reluctance of those bureaucracies to necessarily want to come back in and dramatize that or fess up or put the light on it.

If it hadn't happened repeatedly, you might say, what is the basis for you to offer that theory? But we have got enough powerful examples that we know there tends to be an institutional response not to do that; namely not to tell the truth, when the facts are ugly.

Why would it even be greater in the case of the Gulf War? This is just my own personal thinking, but I have thought about it a lot, and you have asked the question. We all have our own opinions on it.

I think in the professional military in the Defense Department after the experience in Vietnam, which was an unhappy one by almost every way one might describe it, that in the minds of some the Gulf War, when it happened, if it could be executed quickly, efficiently, few deaths, achieve the objectives and so forth, this would be a very powerful validation of the fact that if we got it wrong in Vietnam, we got it right in Iraq, and everyone would feel good about that, and we all salute the work that was done by people who went and fought that war in Iraq.

But this problem of a hundred thousand plus sick veterans coming home was not part of the plan, wasn't part of the adequacy of the planning going in to prevent this kind of thing from happening, despite the fact that we knew he was loaded with these chemical and biological weapons, and we also knew that we were going to go in there with massive air strikes and blow these places up and wherever this stuff would go, it would go. But the point is we knew it was highly dangerous. That is why we had I think a very insufficient but nevertheless some level of protection for our troops. That



is why the alarms were going off all the time once the bombing started.

So now we execute the war. We brought it to an end. Saddam Hussein is still there, and we did not cancel out this threat by any means. I think the threat is bigger today than it was then, but that is another point.

But as we are sort of praising ourselves for the efficiency and the perfection of the Gulf War, lo and behold, we start to have all these veterans, some still on active duty, some who have mustered out, reservists and so forth, who get sick and start dying, and it is a very untidy fact and not a small fact. We are not talking about a platoon or 5 or 10, dozen people or 200 or 300 people. We are talking about—I don't know the final total on the voluntary registry of Gulf War veterans, but I know it reached 130,000 at one point.

Now, here is 130,000 out of something like just over 500,000 or so who served, who came back and who were sick to some degree and felt there was some connection to that problem and went ahead and registered on the registry. Now, that raises huge questions. Should we have bought the alarm system? Are we still using it? Is it adequate? Did we get the people in the mop suits fast enough? Do we need biological weapons detection devices out in the field?

Should we have a different approach when we go in and attack a madman like Saddam Hussein who has got all this stuff which we helped him build in the first place? Which is another untidy fact that goes back a little bit earlier. A lot of people don't want to talk about that. Because you say how did this lunatic end up with all of this stuff, when we sent it to him. We sent all the live viruses over there. That is how he built this capacity, and that is an untidy fact. Nobody wants to talk about that.

So the parades and the hooray, as justified as they are, also have the effect of sort of taking the attention away from these very unpleasant facts.

But the biggest fact of all is you have got a very large number of sick veterans from that war right now who need help. Now, I think that is a fact that we should be prepared and honored to step up to, not find ways not to do something about it or to postpone action or to have a perfect answer. I mean, when you are sick and you can't get out of bed and you can't feed your kids or get a job and you can't get insurance and you got sick in the Gulf and you were well when you went, you were sick when you came back, why isn't that sufficient grounds to help that person?

I don't think you have to have a Ph.D. and be a scientist to be able to figure that out. That is pretty basic. And I don't think we should ask anybody to go and serve and run these risks and come back sick and get anything less than that. Otherwise, why are we here, any of us in this town?

So I think it is sort of upholding the honor of the country. When you ask in somebody to put the uniform on and go out and risk their life and they get sick and they come back and are in desperate shape, do you do something about it or do you walk away from the problem? And I don't mean not doing the research. I am talking about getting them the help they need to survive. That is

the issue, and it is pretty simple I think and something we can do something about.

And, yes, we ought to have legislation to do it, and I bet we get a lot of co-sponsors. I think George Bush would sign it. Yes, we tack a little bit more money on the budget, but it is money well spent. But it is a bill that has come due, and we ought to pay it.

**OPENING STATEMENT OF HON. CIRO D. RODRIGUEZ**

Mr. RODRIGUEZ. Thank you, Mr. Chairman.

Senators Rudman and Riegle, let me thank you for your testimony.

Senator Riegle, I agree with what you have indicated. I know that the military for good reason tends to be a very closed system and for that I gather it makes it very difficult for them to disclose. It bothers me when I heard about Marines and their families who were drinking that dirty water for so long and nobody ever mentioned that until years later, and it bothers me that it took so many years for Agent Orange, and it bothers me—

I recall I was still a State rep right after the Gulf War, still a representative, and I had been invited to talk about another issue to some of the people who had just returned, and at that point they were already beginning to complain about what they felt, the fact that they didn't have any energy and those kind of things, and it has taken so long for us to respond.

One of the things that I wanted to ask you and maybe for you to make some comments is I also had the distinction of having the community that has probably the most bases than anyone else, and I just had a base that was closed, Kelley Air Force Base. I have over 128 diagnosed Lou Gehrig's disease patients, and the Department of Defense has yet to want to do research and want to be able—they haven't been able to make the designation. Yet it is a very disproportional number in the population, over 128 diagnosed, and they were all working at Kelley Air Force Base. So somehow we need to go and look at these bases.

Because I also feel that you talk about disclosure when certain events occur, it is a closed system. They are not going to do that unless something is there that triggers—that they are forced to do that. So I just wanted to throw that out.

Mr. RIEGLE. Could I say one thing? And I appreciate your making that point.

Senator Rudman and I both exclaimed at the high number of Lou Gehrig's disease, but here is my point, and that is there is also a tendency in terms of how we divide the work up. The Defense Department goes out and fights the war. The war ends. The people who fought the war muster out of the military, and they come, in essence, under the jurisdiction and umbrella of the Department of Veterans' Affairs. But the problem is the Department of Veterans' Affairs didn't know everything that might have happened that the Defense Department knows about. There is no way in the world they can begin the kinds of treatment regimes that they need or to argue for the money and the support in the health recovery systems for the veterans that have come out.

So there is this awkward division of responsibility. This crowd sends them in, maybe responsible for the fact that they get sick,

but then, once they leave the service, you know, it is this, and they get dumped over on the next doorstep at an agency that has, in my view, never been richly funded. Then the question is, well, what do we do with this, what happened?

And you go back and knock on the door of the Defense Department. You say, what happened out there in the Gulf arena or what happened on this base that just closed? What is the history of the use of chemical items or anything else that may have been there that one can plausibly start to think might be a predicate for causing a high incidence in Lou Gehrig's disease? If the Defense Department isn't over there providing all that information willingly, the full disclosure to the Department of Veterans' Affairs, how do they know what they may be looking at here?

And, yes, years do pass. I lost a lot of Vietnam veterans to Agent Orange in my district and State, people whose lives I think would be alive today if there had been an honest dealing with that problem earlier in time.

I had a veteran describing being out there after the Agent Orange came down. He described what happened to the forest—the jungle canopy as being like wilted spinach and, you know, what it was like to be in that situation.

I mean, we know an awful lot more sometimes than we want to face up to, and I think here we have got a problem where the Defense Department institutionally has a deep, rich history of not providing this information, of covering up their mistakes, not wanting to have to sort of go back and reengineer, retool, accept responsibility.

I haven't seen anybody being willing to accept any responsibility for what went wrong in the Gulf War that has given us a hundred thousand sick vets. I haven't seen anybody volunteer for that assignment.

Mr. RODRIGUEZ. Senator Rudman, you mentioned that you felt comfortable with what we have done, and I was going to ask from you some suggestions as to what I should do. Because I do have over 128 and a lot of them are also civilians that have worked on that base and how to deal with that and how to get the Department of Defense to do the right thing.

Mr. RUDMAN. Congressman, I sat here with Don Riegle when you gave us that statement. That appears to me to be a national health crisis in your district. I never heard of 128 ALS victims on one base. If that number is accurate, I think—

Mr. RODRIGUEZ. I will send you the documentation and the articles that have been written.

Mr. RUDMAN. I think you ought to get the United States Public Health Service involved rapidly out there as well as the VA and others. That is a serious issue. I have no other answer than that.

Mr. RIEGLE. I would say one other thing. I would drill into that. I would become—my advice to you as you are, you brought this to light today, I would hound people until they were sick of hearing from you. Because that is the only way you are going to get any action on this thing. You are going to have to make yourself up to the point of being obnoxious by repetition all the way up to the Secretary of Defense, or wherever it takes, and I would encourage to you do it.

The only time I found you get results against these resistant bureaucracies is when you hammer them and hammer them and hammer them. It is the only thing they seem to understand. I wish it were not the case, but it is.

Mr. MORAN. Mr. Lynch, welcome to the committee.

Mr. LYNCH. Well, I first of all want to thank both of you Senators for coming before us and being such champions of our veterans. I do want to agree with both of you in the sense that this presumption that might be created for Armed Services veterans who have come back from the Gulf—

Mr. MORAN. Mr. Lynch, your microphone may not be on.

Mr. LYNCH. I do want to speak to the suggestion of a presumption on behalf of our veterans that are coming back from the Gulf. There is—as far as I am concerned, the ALS example where—in our reports where it shows that we had this control group of veterans, and in those who were deployed in the Gulf, there is a 200 percent increase in the rate of ALS among those veterans, in my mind it is the smoking gun that we are looking for. And what Representative Rodriguez and his situation, it could be just an issue of exposure, just a greater exposure during wartime and active service.

I also agree with the characterization of a debt owed. All across my district, there is a consolidation going on with regard to veterans services and facilities, and it is almost as if this is discretionary spending. This is not discretionary spending. This is, as you have said, Senator Riegle, this is a debt owed for honorable services and sacrifice rendered, and that is the way we should be treating this. And I am just happy to hear your words this morning, both Senators, and I am just very proud to be on this committee and I am looking forward to working with you.

Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Lynch. Mr. Snyder.

Mr. SNYDER. Thank you, Mr. Chairman. Just a comment on the 128 cases you mentioned. I agree with Senator Rudman, if that number is an accurate number, in a localized geographic area, Mr. Chairman, we may well want to consider having a hearing on that particular site alone as a way of bringing focus on that, if you and the staff determine that the people are alleging 128 cases, that is going to have phenomenal impact on that area and the Veterans' Administration in that area.

Senator Rudman, in your written statement, you made very strong statements about the importance of—your words—meritorious peer reviewed research projects be funded. And I agree with that. Would you take a few minutes and just talk about why you made that comment and that statement?

I think a lot of us here do get apprehensive, not in the VA at all necessarily, but, you know, if we start thinking that politics may be getting involved in who gets what funding for what research project. Would you amplify that, please?

Mr. RUDMAN. Sure, I would speak of it generally. I am not out here to damage anybody's reputation, but you can fill in the blanks. There were several instances as we were doing our work and we were not involved in awarding grants, but we were actually looking at everything that was going on to make sure it was being done

right by the VA and the DOD, and we came across some research grants that had been granted because there had been substantial political pressure brought by people in Congress, outside of Congress to say, you know, this is worthy, these people are very good and they have been turned down. They ought to get the grant. And in several cases, they did.

The thing that troubled me in one or two of those is that after the money was spent, I forget how much money, but it was millions of dollars, several million dollars, they came in with a report saying we believe A, B, C, and we would like another \$10 million. At which point the people at DOD and VA or DOD at this point who are, after all, dealing with money that you appropriated to them and asked them to spend carefully said, you know, fine. But before we give you another tranche of money, we would like you to follow a protocol that is a standard scientific protocol to prove what you are trying to prove. They were essentially told, No way. We are not going to do what somebody else wants us to do from the great universities all over the country. We are not going to do that. We will get our money anyway. And they have. And I just do not think that is the way you ought to get Federal money.

Your ranking member says let's have a 10 percent set-aside for unique research. I do not have a problem with that. That is different. I am not talking about that. I am talking about people who have done work. The work has not been validated under a peer review system that normally would be put in place for a second study. They just want more money without proving where they were. I, frankly, as you know, am somewhat of a fiscal conservative. I like to be a bit more careful with federal dollars than that.

Mr. SNYDER. I think your point is good. Medical research is no different than any other part in life. You get what you pay for. If I buy a new car, I better check out that car substantially before I pay the money and not afterwards. And that is the whole point of the peer reviewed projects, and if we bypass that thinking we are somehow going to help veterans, we may not be helping veterans, but just waste money and may raise some expectations and hope that isn't there. Because this, obviously, is a frustrating issue for veterans. But it is also frustrating for clinicians and doctors and nurses.

Mr. RUDMAN. Terribly.

Mr. SNYDER. People talk about the vague symptoms, and yet, you know that there is a person hurting here. But there is nothing—I am a family doctor, there is nothing more satisfying than somebody who has a minor cut on their arm and you stitch it up. I know what the problem is and they are going home well. That is easy. But that is not at all what these cases were.

Mr. RUDMAN. You would find it very interesting to take a look at the list of studies that have been funded and where. There have been studies since 1998. I forget how many. It is over 1 million. It may be getting closer to 2 now. I don't know what State you are from.

Mr. SNYDER. Arkansas.

Mr. RUDMAN. I would not be surprised if there were things at that university medical school that were funded. I know Michigan, California, Massachusetts, literally all over this country. I think in

Congressman Lynch's district, there are extraordinary laboratories with extraordinary people trying to find answers.

Mr. SNYDER. And the Veterans Hospital system has excellent research going on in a lot of different areas.

Mr. RIEGLE. Would you permit me to add one comment, a slightly different comment to that point? That is, I think that you can have that proper discussion on where should the research focus be and peer review and so forth. But I would like to separate that for the moment from the issue of a response now to sick veterans from the Gulf War. That is, that however one does the research, there is a time factor here. And I think just as a person would come into your office who is desperately ill, I think we now know enough, even though it is incomplete and even though there are some mixed elements in our knowledge base, that if we see someone who served in the Gulf War who is now desperately ill, very ill, can't function and we cannot pin down exactly where it came from—but we know one fact, that the person was well enough to go to fight in the war in the first place, we sent a well person to the war—I think we now know enough in the forms that it has that I think we should make a presumption that they should receive some disability payment help to permit them to subsist and hopefully live long enough for the research to be completed by whoever it is, whoever does the research.

See the problem we run into the other way, and the problem that we are running into is that we have sick Gulf War veterans who are getting no response because of a long lead time in the research, whoever does it, and they are dying in the meantime. And I think we now know enough to know that that is probably not fair. Probably not right. And we should do something about it and we have the power to do something about it.

Mr. SNYDER. My time is up. But I did not read anything in Senator Rudman's statement nor meant to imply in anything that I said that somehow all veterans are put on hold until there is definitive—that is not what anyone is saying, those are separate issues. The issue of prevention, until we know specific cause itself, makes it much more different to prevent these kinds of things in the future. But thank you, Mr. Chairman.

Mr. FILNER. Mr. Snyder, if I may. We will have testimony later on, and I have talked to researchers all across the country—people who have protocols of treatment based on certain theories that have been effective in treating Gulf War illness but have been rejected by the peer review system, by a system which did not want to hear that theory or belief or treatment.

So the problem is, the system that is set up now rejects people who just have a different way of looking at the problem. And we are going to hear testimony on that later.

I don't want to throw out the peer review system. But there is something wrong with it if it does not allow certain types of research to be done. And certain effective treatments. There have been treatments, Senator, that have been just dismissed out of hand by the VA and the DOD. I have personally seen those treatments save lives. I have personally seen that.

You say, Congressman, we do not know anything. We have knowledge that these bureaucratic and scientific dispassionate peo-

ple do not have. Because we have seen it in our constituents and that is our job. And so that is the problem, Dr. Snyder. And we will have some testimony on that.

Mr. SNYDER. In the business, you know we call those "anecdotal experiences" and that is a very dangerous thing for physicians—

Mr. FILNER. But it may be true also.

Mr. SNYDER (continuing). To say I treated this one person in medical school in 1973—

Mr. FILNER. What if it is 2,000?

Mr. SNYDER (continuing). And did this and they got better. When, in fact, the point of research that is peer reviewed and gives you the answers you want is when you go out there and do that kind of thing on 5,000 people, or look at what has been done before, it may not be the experience of the Member of Congress that sat down with one person—

Mr. FILNER. I understand, but what if it is 2,000 that have been treated successfully and been rejected?

Mr. SNYDER. But Mr. Filner, that is 2,000. I don't know if that is statistically significant or not.

Mr. FILNER. If 2,000 people have gotten better, that is not significant?

Mr. SNYDER. Well, that is the point of having scientists sort this stuff out.

Mr. FILNER. But there is a limit to that expertise and that so-called scientific dispassion. There is a limit to it that has prevented us from moving forward.

Mr. MORAN. Senators, thank you very much for your time this morning. We appreciate you taking the opportunity to enlighten us and we are grateful for that opportunity. Thank you.

We will call the next panel to the table. That includes Dr. Frances Murphy of the Veteran's Administration, and Ms. Ellen Embrey of the Department of Defense, and Dr. Susan Mather and Dr. Craig Hyams of the VA, and Dr. Michael Kilpatrick of DOD accompany them.

**STATEMENTS OF FRANCES MURPHY, DEPUTY UNDER SECRETARY FOR HEALTH, DEPARTMENT OF VETERANS AFFAIRS, ACCOMPANIED BY SUSAN H. MATHER, CHIEF PUBLIC HEALTH AND ENVIRONMENTAL HAZARDS, AND CRAIG K. HYAMS, CHIEF CONSULTANT, OCCUPATIONAL AND ENVIRONMENTAL HEALTH; AND ELLEN P. EMBREY, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR FORCE HEALTH PROTECTION AND HEALTH AFFAIRS, DEPARTMENT OF DEFENSE, ACCOMPANIED BY MICHAEL E. KILPATRICK, DIRECTOR OF DEPLOYMENT HEALTH SUPPORT**

Mr. MORAN. Dr. Murphy, welcome back to this subcommittee. And I know this has been a busy week on this topic and others at the Department of Veterans Affairs, we are happy to have you here and we welcome your testimony.

**STATEMENT OF FRANCES MURPHY**

Dr. MURPHY. Mr. Chairman, thank you for the opportunity to testify today on the changes in VA health care and benefits assist-

ing Gulf War veterans. I have submitted a formal statement for the record.

The recent commemoration of the 10th anniversary of the Gulf War makes this an excellent time to reflect upon what we have learned over the past decade and the resulting changes we have made in order to improve our response to the needs of Gulf War veterans.

This has been made all the more relevant by the recent deployment of U.S. troops in the war against terrorism. At this time, I would like to focus my remarks on just a few important issues.

Based on our experience with Gulf War veterans, we recognize the critical importance of good health documentation and lifelong medical records that cover the periods before, during, and after deployment. Our understanding of many Gulf War issues is hampered by inadequate baseline health information and inadequate documentation of health during active duty. DOD and VA have recognized this shortcoming and are attempting, through the recruit assessment program, to collect routine baseline health data from U.S. military recruits. This pilot program was established to obtain baseline health information for use during military service and for veterans' health compensation and research programs.

The VA and Congress have also recognized the importance of providing health care and health surveillance for veterans as soon as possible following combat missions in the future. Public Law 105-368 authorized VA to provide health care for conditions thought to be related to combat for a 2-year period following a veteran's release from active service. This 2-year period encourages combat veterans to seek care promptly if they have health problems or concerns that may be related to their service.

It also allows VA to collect basic health information to aid an evaluation of specific health questions, including those about difficult-to-explain illnesses.

Our experience following the Gulf and Vietnam wars have shown that health care needs of combat veterans do not always fit into well-defined, medical diagnostic classifications, and that combat casualties do not always result in visible wounds. Historically, many veterans have returned from conflict with difficult-to-diagnose, yet serious health problems. Research currently indicates that for many veterans, the unifying risk factor appears to be deployment itself, rather than any identifiable exposure.

The insights to be gained from such research have clear implications for future VA health care research and for veterans' compensation.

VA has responded to this issue in part by establishing two national centers for war-related illnesses. They are located in Washington, DC and East Orange, New Jersey. They will focus on areas of medical care, research, risk communication and education for health care personnel. The new centers work with the Departments of Health and Human Services and the Department of Defense to ensure that lessons learned are applied to both veterans and active duty military.

Building on the lessons learned from our experience in the Gulf War and Vietnam veteran programs, Dr. Garthwaite and I implemented the Veterans Health Initiative. This program enables prac-



tioners to better understand and recognize the relationship between health effects and military service, to allow veterans to better document their military history, to prepare health care providers to better serve their veteran patients, and to establish a database for further study.

Several of the planned education modules have been completed and others are under development. Recently, the Gulf War veterans module has been put up on our Web site for use by our practitioners.

We have also worked with DOD to develop new clinical practice guidelines for post-deployment health problems and two symptom-based illnesses, chronic fatigue syndrome and fibromyalgia. These new guidelines will give VA primary care providers the tools they need to diagnose and treat veterans with such illnesses.

The Gulf War made clear the value of access to timely reliable information about health risks servicemembers face during their deployment. In this regard, VA has developed a new brochure that addresses the main health concerns for military service in Afghanistan and south Asia. It answers health-related questions and describes relevant medical care programs the VA has developed in anticipation of the health needs of this group of veterans when they return home from combat and peacekeeping missions abroad.

Work on the Gulf War health issues has significantly increased intergovernmental coordination between VA, DOD and HHS. The initiation of the Gulf War Veterans Coordinating Board in 1994, and the reinvigoration and inauguration of the Triagency Military Veterans Health Coordinating Board in 2000, has served to institutionalize future interagency cooperation. This formalization of government coordination will play a critical role in addressing health problems among veterans of future conflicts and peacekeeping missions.

Increased collaboration has also extended beyond the U.S. borders. On postwar health issues, VA scientists and policymakers share lessons learned with their counterparts on a routine basis in Canada, the United Kingdom, and Australia. Based upon the similarities of health problems of war veterans of different countries, these collaborations have begun to focus on health questions that consistently arise among military personnel returning from all hazardous deployments. The collective experience of caring for Gulf War veterans in the United States, Canada, the UK and Australia has also led to a greater appreciation of the need to assist veterans with unexplained symptoms.

Mr. Chairman, a veteran separating from military service and seeking health care today will have the benefit of VA's decade-long experience with Gulf War health issues. From the lessons learned in serving veterans of past conflicts, VA today is in a better position than ever before to meet the needs of all veterans who serve in all capacities, whether that is at home or abroad.

This concludes my statement, my colleagues and I will be happy to answer any questions from the members of the subcommittee.

Mr. MORAN. Madam Secretary, thank you very much.

[The prepared statement of Dr. Murphy appears on p. 92.]

Mr. MORAN. Secretary Embrey, we are delighted to have you in front of the Veterans' Affairs Subcommittee. We welcome your testimony.

**STATEMENT OF ELLEN P. EMBREY**

Ms. EMBREY. Thank you very much, Chairman Moran, Mr. Filner, and other distinguished members of the subcommittee. I thank you for this first opportunity to be here and to testify for my first time before Congress.

I am accompanied today by Dr. Michael Kilpatrick, who is our key advisor in health affairs within the Department on deployment health support. Dr. Kilpatrick has the honor of working through the entire staff there and advising Dr. Winkenwerder, the assistant Secretary for Health Affairs on all matters involving the—

Mr. MORAN. Secretary, could you pull the mike closer as well?

Ms. EMBREY. I am sorry. Talk loud? Is it on? It does not sound like it is on.

Mr. MORAN. You may need to trade mikes with Dr. Murphy. We are sorry on your debut in congressional testimony to have mechanical difficulties.

Ms. EMBREY. That is fine. This is better. Yes, it is. With your permission, I would like to submit the Department of Defense's written testimony for the record and summarize key messages so that you will have time to ask questions.

Today, the Armed Forces of the Department of Defense are deployed throughout the world and currently supporting Operation Enduring Freedom. We are quite mindful of this sacrifice and are totally dedicated to providing the health care they deserve. And while we continue to learn lessons from our current and past deployments, and we want to continue to address issues relating to them, we will continue to vigorously pursue resolution of these issues particularly those relating to Gulf War.

Before the Gulf War, the Department of Defense had in place force health protection measures that had served us well in previous deployments. Included in these programs were periodic medical examinations, preventative medicine measures and endemic disease surveillance. Execution of those programs resulted in very low rates of preventable diseases during the Gulf War. However, since the Gulf War, the Department of Defense has been focused intently on nontraditional force health protection threats.

Department of Defense policies, directives, joint staff memoranda and other policy initiatives have been incorporated to address the lessons learned of the Gulf War experience. Pre and post deployment questionnaire assessments have been established to identify troops needing prompt attention for their health problems. An environmental surveillance program was also established for deployment area of operations to help field commanders avoid or abate possible health hazards.

We have also been working very hard to establish systems to capture and use deployment-related medical information to better monitor the possible long-term health effects and consequences of their deployments. Better medical recordkeeping, as everyone has been discussing today, will definitely improve our ability to assess and group health outcomes from these deployments.

Use of effective vaccines are one of the major ways we try to protect the deployment health of our forces. The routine administration and electronic documentation of those immunizations in the medical records is our near term goal and standard electronic medical information systems are now being developed and interim measures have been implemented across the services to serve these objectives.

Within the Department, we have broadened the focus of the former office of special assistant for Gulf War illnesses to now include future and current deployments. That staff, in cooperation with the joint staff and the military services, will provide Dr. Winkenwerder and me with critical assessments and recommendations on ways to improve deployment health-related processes and systems.

With this information, we will more closely monitor deployment force health protection matters and assure that the military health system is responsive to the health concerns of our service members, veterans and their families.

A key area in which we strive to address the health concerns of service members and veterans is through our support of scientifically valid medical research. The Department of Defense remains an enthusiastic partner in cooperative interagency federally-sponsored research efforts with the Department of Veterans Affairs and Health and Human Services. We are committed to investigating the possible causes of illnesses and treatments for medically unexplained physical symptoms that affect veterans. In addition we are actively seeking ways to expand our close collaboration with the Department of Veterans Affairs to improve medical service to our veterans.

Over the last 3 years we have developed and tested a patient-oriented evidence-based clinical practice guideline to aid primary caregivers in the assessment of illnesses that can occur after deployments. Clinical use of these guidelines will start next week. Among our many other collaborative efforts, we have instituted a single separation medical examination, which will serve the needs of the veteran, the Department and the VA and help expedite claims within a 30-day time frame.

In conclusion, the Department of Defense is committed to ensuring the health of our military forces. You have my commitment and that of Dr. Winkenwerder that the Department will aggressively assess and address the challenges that lie before us. We are aggressively executing our responsibilities to oversee health protection, fitness, casualty prevention and care of the men and women we ask to defend our country. Again, I thank you for the opportunity to be here today and I am happy to answer any questions.

Mr. MORAN. Thank you both, Madam Secretaries.

[The prepared statement of Ms. Embrey appears on p. 103.]

Mr. MORAN. Secretary Embrey, as I indicated in my opening statement, 25 of my neighbors, men and women, were deployed last Monday for some place in the Middle East. And if I was to have a conversation with them or their parents or their children to tell them what assurances, what steps are being taken to greatly ensure their health while serving and upon their return, what would be that story to those servicemen and women and to their families?

And specifically, what I would like to explore is what is the Department of Defense doing differently today in the deployment process and during the time of service for the—for those who will be veterans of this battle on terrorism, Enduring Freedom, as opposed to those who became veterans of the Persian Gulf War?

I asked that with more words than probably necessary, but I would like to have you contrast the deployment and service of those Persian Gulf War veterans and those who will be veterans of Enduring Freedom. What have we done to improve the chances that they will return safely, healthy, and live more healthy lives upon that returning?

Ms. EMBREY. Since the Gulf War, I know there has been 12 specific DOD policies, programs, initiatives, policy and guidance out to the services to make institutional corrections to the health system to ensure that through the continuum of care for our members, whether they are at home or being deployed, that we maintain appropriate support for them and that we maintain good records and that we have systems in place to assure that they are healthy before they deploy and there is a regular way to do that. That there is a periodic—before deployment there are assessments that are provided as a routine measure to determine whether or not, since the last time they were provided an assessment, if there is anything that would preclude their deployment or eligibility to perform while they are being deployed. And then another process after they are deployed to ensure that any issues that arise as a result of that deployment are captured quickly and put into the record as part of the system so that we can track and make sure that we are taking care of those individuals.

There has been quite a bit of research ongoing, longitudinal studies, other kinds of initiatives. We set up three separate centers focused on deployment health matters. And since I am only 2 weeks in the job, this is all my brain can hold at this time. But I am accompanied by a real expert who could probably add more detail if you would like.

Mr. MORAN. Dr. Kilpatrick.

Dr. KILPATRICK. Yes, I think Secretary Embrey gave you the overview of the policies, but the question as to how to answer the mothers and fathers whose sons and daughters are going into harm's way, what are we doing differently, to really address that from the Reserve component side, there is a much more aggressive campaign to make sure that those people have complete physical evaluations done when they are brought on active duty, because this is coming out of being a citizen, now becoming a soldier to make sure that there is time for that medical evaluation; that the dental evaluation is done and that people get the dental care they need before being deployed, because certainly, dental assets are limited under the deployment situation; to make sure that the required vaccines are up-to-date, that we are not giving a bolus of vaccines all at once, but that we are giving them when they are due. And it is catching people up when they are late and being up-to-date.

For the active duty component we are focused and aggressively looking at making sure that people's physical examinations are done on time. Their dental evaluation is done annually so what

when they are deployed, there is a quick assessment: Has anything happened to you since your last complete checkup that you have a concern about before you deploy?

Once they are deployed, we are trying to make sure we get the appropriate medical assets. DOD is working very hard because today's war is a different deployment situation than we have done in the past. We do not have battalions or garrisons, large groups of people in one place. We have small groups of people who are highly mobile, and that makes it very difficult for the medical assets in the Department of Defense to be able to carry along with those individuals.

Secretary Embrey and Dr. Winkenwerder were just down with the Special Forces command last week, and they were wanting to use a Palm Pilot to keep track of symptoms so that they would know on what day they had symptoms and that information would be then provided back to the Department of Defense to be able to do that on-the-job assessment.

I think, finally, in the theater, we have people doing essentially environmental surveillance, looking at the soil, the water, the air, for pollutants. And that information is being categorized as to where people are located and what were those kinds of exposures. And I think Secretary Embrey talked about coming back, the clinical practice guideline. The primary care physician will now be asking, do you believe that the symptoms that you have, the worries that you have about your health today could be related to a deployment, and if the person answers yes, then the full medical focus becomes what was your exposure, what was your concern, what is the basis of that, what are the symptoms, how do we do the appropriate medical testing? Much better than going to a clinic, that is, kind of everybody gets the same evaluation.

Mr. MORAN. Thank you. In the interest of time, I would ask for you to submit to the record in writing a couple of things for me. The 12 points, the policy that you described, Madam Secretary, and then I am especially interested in knowing the vaccination immunization protocols that our servicemen and women undergo today before and during deployment. What are we vaccinating for? I would like to know that.

Mr. Filner.

Mr. FILNER. Thank you, Mr. Chairman. Were vaccination records, immunization records, shot records kept for the Persian Gulf War?

Ms. EMBREY. There is a requirement to maintain immunization records on paper. It has been a long-standing policy of the Department. And if the immunizations were administered in the field, then that record should have been taken.

Mr. FILNER. That is what I would assume. Could you make those available, of Gulf War veterans, to the committee?

Ms. EMBREY. I guess I have the power to say yes.

Mr. FILNER. I have asked this question before and I was told they did not exist. If you say they exist, I would like to see them.

Ms. EMBREY. I said they should have been there.

Mr. FILNER. So you will try to provide those to this committee?

Ms. EMBREY. I will request that what we have is provided.

Mr. FILNER. Do you know if any part of the vaccination protocol included antibiological warfare vaccines?

Ms. EMBREY. Could you restate the question?

Mr. FILNER. Was there any part of the vaccination program aimed at biological weapons that we knew Iraq had access to and might use?

Ms. EMBREY. I believe the anthrax vaccination and botulism toxin.

Mr. FILNER. Those are the only two?

Ms. EMBREY. Yes, sir.

Mr. FILNER. But that would show up in any records that you would have? All right. I think we would like to see those.

Do you know why it took so long for the Department of Defense to acknowledge the impact of the events at Khamisiyah?

Ms. EMBREY. I am not familiar with the events at Khamisiyah. I do know that the Department has devoted a significant amount of research in trying to understand if there is a scientific basis to link outcomes with the deployment.

Mr. FILNER. Well if you deny that there was anything going on and then say it only affected a couple of people, there would be no reason to figure out that if there was any link. And that is what the Department of Defense did for years. Basically. Denied that any event occurred and then when they had to admit it, first said it only affected a few people and then had to acknowledge maybe 100,000 people could have been affected?

Ms. EMBREY. Sir, I am here now ready to address your issues. I am not then. I am here and I am today.

Mr. FILNER. So you would not stonewall on any of these kinds of issues that came up either now or in the future?

Ms. EMBREY. For the current deployments and for the future, absolutely not.

Mr. FILNER. We will see. Why do you think, by the way, that there is so much distrust of the agency that you are working for? The distinguished Senator from Michigan used the word "stonewalling." The undistinguished Congressman from California used the word "stonewalling" I mean, why would there be a sense that we are not getting the truth?

Ms. EMBREY. I cannot speak for their opinions and their frustrations, but I do believe that any time we believe by just observation that people who have sacrificed for our country are not being given a fair shake, I think that it is important that we look into it and do the best we can for those folks and make sure that we are taking care of them. I can't argue with that emotion, and I believe that we need to do what we can to investigate whether or not this is something that is related to the deployment, and that we should take care of it. And if it isn't, do what we can to take care of it if it is within our ability to do so. And I think this committee is very—

Mr. FILNER. I am glad to hear the words, we will see what actions actually come from your agency.

Dr. Murphy, if the result of illness is, as you were quoted, deployment as opposed to other factors, why wouldn't you support the recommendation of Senator Riegle that we have a presumption of

a problem and treat all veterans who were there? Would you accept that recommendation?

Dr. MURPHY. Sir, that is a policy and a legislative issue that we have not taken up in the Department, and I do not have—

Mr. FILNER. Why?

Dr. MURPHY (continuing). I do not have a position on that at this point.

Mr. FILNER. It would follow from your own statement that deployment was the cause, and anybody that was deployed should be given treatment. That is not the policy right now of the VA.

Dr. MURPHY. If you review the historical records going all the way back to the Civil War, it is clear that after every deployment, individuals have come back with a group of multisystem symptoms after combat. Those symptoms occurred after the Vietnam war, after the Gulf War, and certainly what I think we need to prepare to expect after—

Mr. FILNER. So what does that mean? What does that lead you to do then, if that was the case? That means we do what we did in all those wars and do not make the presumption?

Dr. MURPHY. We have a presumption created for undiagnosed illness compensation.

Mr. FILNER. Undiagnosed illness. If something is diagnosed, you do not give any treatment. I mean, if they have a diagnosed ailment, it seems rather strange.

Dr. MURPHY. If they have a diagnosed illness, we have a direct compensation system that also has the ability to deal with those.

Mr. FILNER. So all veterans who were in the Gulf are getting treatment based on presumption or diagnosis, are you saying?

Dr. MURPHY. Well, let's separate health care from benefits programs. Yes, every Gulf War veteran is eligible to receive health care in the VA. They can enroll and receive the full complements of health care benefits. Outpatient, inpatient, and long-term care. Related to disability benefits, VA has separate compensation regulations for diagnosed and undiagnosed illnesses in the Gulf war veterans.

The current policy is not consistent with the program that Senator Riegle proposed.

Mr. FILNER. I would like the Department to examine that and give our committee a response to his suggestion.

Mr. MORAN. The committee and witnesses will recess briefly to allow members to go vote. It is my understanding that it is just one vote and then no more for the day. If you will give us a few moments we will recess and pick up where we left off. Thank you.

[Recess.]

Mr. MORAN. The committee will reconvene; and, assuming Mr. Rodriguez can speak loudly, we will ask for your help and assistance.

Mr. RODRIGUEZ. I don't know if you heard me earlier that at Kelley Air Force Base I have 128 patients who have been identified with Lou Gehrig's disease, but I have been trying to get a volunteer study done on employees, and this includes civilians in the base. A lot of civilians are veterans, and I can understand the VA has a difficulty going into a base, but I think with maybe a joint effort it would be extremely helpful. Because I know that we have had

some articles in a variety of magazines on this issue, and it is a real serious situation and a very difficult one. Mortality rates of those people that have worked at that base would be helpful in trying to identify some of the causes and some of the results.

I just wanted to mention that to you because I will be contacting you later on and getting your help and assistance in that area, and I know you had your colleague next to you who is probably familiar with some of the situations there, but we are trying to get some additional assistance and some additional resources along the two studies, especially for those—and that includes civilians. I know we have had a difficulty, but we all understand that even some of the spouses that have had some problems with the children, there has got to be a way of reaching out to those people that have also worked out on those bases.

It might not just be the Gulf War. It might be a combination of things that occur that have resulted. And I don't know if you want to make my comments—except you will be willing to work with me, I know.

Ms. EMBREY. Absolutely. I am willing to work with you, and it is also the President's specific objective to have the Department of Defense work with the VA on issues where it is to our mutual benefit to collaborate and provide support to our communities of interest.

Mr. RODRIGUEZ. Remember that the VA doesn't have too much resources so you need to provide them with some resources.

Ms. EMBREY. I believe this committee has control over that.

Mr. RODRIGUEZ. Not the way we have been working lately.

Let me ask Dr. Murphy, I know that we have found and maybe it goes to both—we found I know there are clusters of Lou Gehrig's disease and like in Kelley and elsewhere and with the Gulf War veterans, and I am just wondering where do we go from here in terms of research or how we can maybe come to grips with this a little bit better.

Dr. MURPHY. The recent study that was reported at a joint meeting of DOD, VA, and HHS investigators sponsored by the Military Health Coordinating Board showed that there was approximately a two times increased rate of ALS in those who served in the Gulf War compared to those who did not deploy. There were two further follow-up phases in that study that will look at some questionnaire survey data on self-reported exposure information and also to do some genetic typing to determine whether there is any genetic predisposition that can be identified in this group.

In addition, Secretary Principi, has, instructed VA's research service to develop a research program specifically focused on looking at causes and treatments for ALS; and we expect a report from the Office of Research and Development on those activities.

Mr. RODRIGUEZ. Thank you very much. Thank you.

Mr. FILNER. Would you yield, Mr. Rodriguez?

Mr. RODRIGUEZ. Yes, sir.

Mr. FILNER. When you talk about groups and spouses, I will tell you pets have also evidence of illness—that suggests contagion, right? Doesn't suggest contagion? What does it suggest?

Dr. MURPHY. I think you should not draw that immediate conclusion. An epidemiologic study would be necessary to look at all of



the factors that might be affecting a cluster or on outbreak of illness, and what you have described so far would not distinguish between an infectious or a chemical environmental effect as an example.

Mr. RODRIGUEZ. I don't know if I have any more time, but I know when I mentioned the base, you have a lot of civilians there. Most of them tend to be veterans, but we might have some nonveterans. So some of the contamination or some of the problems could be base related in terms of activities that were done in the base for the last so many decades.

Mr. FILNER. Yes. But in her testimony she said it looks like deployment. So if somebody not deployed comes down with the virtual similar thing, that would suggest contagion to me.

Mr. RODRIGUEZ. Yes, but—

Mr. FILNER. I am not a doctor. You are. You said it suggests certain studies. I can't figure out why these haven't been done a dozen years after the war. Have they been done, the ones you are talking about?

Dr. MURPHY. There are a lot of studies under way, and as we identify a problem we then have to answer the questions that result from that new issue that has been identified.

Mr. FILNER. These problems have been suggested to you for years and years and years, and I am glad you are doing some of it now, but it suggests you are not going into it with the enthusiasm and the commitment that you need here.

Mr. RODRIGUEZ. Let me make just one additional comment.

Where we find ourselves now in terms of having to deal with the bioterrorist and chemical terror—and this is for us, too, and the Department of Defense and VA. As we look in terms of preparing the first responder teams, including the VA, and I know we set up some kind of a project where we are going to identify four sites in the country for first responder teams, there is a real need for us to look at some preventative types of things, that we might look at that from the Department of Defense and the VA perspective in terms of first responder teams that might help to look at identifying some of that.

I was just in Jerusalem, and I was surprised to see some of the things they were doing in that area, and I am not sure where we are at in terms of doing that to see how we—you know, not only in terms of dealing with the ones we already have but possibly prevent future occurrences from occurring. That might be helpful, and that would be good for the Department of Defense as well as the VA.

Dr. MURPHY. Mr. Rodriguez, I think your point is very well taken, and I can tell you that Secretary Embrey and I have actually already met about these issues both together and with the Department of HHS.

Mr. MORAN. Mr. Rodriguez, thank you. Your comments about preventative or precautionary efforts are exactly on what we are trying focus on as to what do we do to prevent those kinds of problems that we experienced in the past. So I appreciate those comments.

Dr. Snyder.

Mr. SNYDER. Just one question for the record, Secretary Embrey, that relates to what Mr. Filner asked before the break. Would you provide information, please, on what the recordkeeping for vaccines was during the Vietnam war and Gulf War? Specifically, was there a notation made in the medical record, or was the only written record the shot card that the person carried around during the Gulf War? Was there an independent list made as the vaccines were given in which they said here is a list of the ones that we gave this day? And is there also good recordkeeping of the geographic location as well as the date at which the vaccine was given?

That is just a question for the record. Thank you.

Mr. MORAN. Thank you, Doctor.

Thank you, panelists, for your testimony this morning.

I do hope there is significant cooperation between your two departments and the Department of Health and Human Services. I do think we have a lot to learn and a lot of progress that can be made in protecting our future veterans. Thank you.

I anticipate that there will be follow-up questions as well that can be answered in writing. Thank you.

Our next panel is Panel 3, and I call them to the table.

Dr. James Holsinger, he is the former VA Under Secretary of Health; Dr. Enrique Mendez, former Assistant Secretary of Defense for Health Affairs at the Department of Defense; Dr. Sue Bailey, who is also former Assistant Secretary for Health at the Department of Defense; Dr. Ronald Blanck, the former Army Surgeon General; and Dr. Garth Nicolson, the President at the Institute for Molecular Medicine.

We welcome you to our committee. We will begin with Dr. Holsinger.

General Blanck had to leave our committee. His statement will be made part of the record.

[The statement of Dr. Blanck appears on p. 108.]

**STATEMENTS OF HON. JAMES HOLSINGER, M.D., FORMER UNDER SECRETARY FOR HEALTH, DEPARTMENT OF VETERANS' AFFAIRS; HON. ENRIQUE MENDEZ, M.D., FORMER ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS, DEPARTMENT OF DEFENSE; HON. SUE BAILEY, D.O., FORMER ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS, DEPARTMENT OF DEFENSE; AND GARTH NICOLSON, PH.D., PRESIDENT, INSTITUTE OF MOLECULAR MEDICINE**

Mr. MORAN. Dr. Holsinger, thank you very much for your participation today.

**STATEMENT OF HON. JAMES HOLSINGER, M.D.**

Dr. HOLSINGER. Mr. Chairman, it is a pleasure to be here, members of the committee. It has been almost a decade, about 8 and a half years since I had the opportunity to appear before this subcommittee or a portion of the House Veterans' Affairs Committee. It is a pleasure to be back.

My understanding was that we were going to address today, at least this panel, the lessons that we have learned from our experience during and following the Persian Gulf War.

From 1990 to 1993 I served as the Chief Medical Director and Under Secretary for Health in the Department of Veterans' Affairs. In doing so, I was responsible for developing VA's policies concerning the health care of Persian Gulf veterans returning to the United States, leaving the military forces of the United States and becoming veterans.

By 1991 I had served for over 20 years in the Department of Veterans' Affairs. During most of this time the VA was under siege concerning our response to the Agent Orange issues stemming from the Vietnam war. Within a matter of months following the cessation of hostilities in the Persian Gulf, the health care concerns of veterans of this conflict, which later became known as the Persian Gulf syndrome or Persian Gulf War illness, became evident.

My deeply felt concern at this time was that America's veterans of this conflict not be subjected to similar insensitivity that occurred following the Vietnam War. As a result, I issued instructions to all VA medical centers that veterans who complained of health care problems which they believed stemmed from their service in the Gulf be treated for those conditions just as we were then treating veterans of the Vietnam War who claimed exposure of Agent Orange.

At the time that I issued this directive, the Department of Veterans' Affairs did not have congressional authorization for this action. Following discussion within the Department, rather than withdrawing the directive, the Department issued regulations supporting my action. We continued to develop the Persian Gulf registry for veterans of this conflict and developed three specialized centers, VA medical centers, to diagnose and treat veteran patients who could not be adequately diagnosed in the VA medical center closest to their home.

Then chairman Sonny Montgomery understood the dilemma at an early date, and he introduced H.R. 5864 in the 102nd Congress. On September 16, 1992, he held hearings on the possible adverse health effects of service in the Persian Gulf and on VA's efforts to establish a Persian Gulf registry for tracking the health care status of these veterans.

Then Deputy Secretary Principi and I appeared before the committee representing the Department. The result of this hearing was enactment of Public Law 102- 25, Title VII, the Persian Gulf War Veterans' Health Status Act of November 4, 1992.

As we testified on September 16, 1992, the Veterans Health Administration was poised to act immediately upon enactment of enabling legislation to issue a directive entitled the Environmental Medicine Persian Gulf Program. I signed this directive just 1 month later on December 7, 1992. Throughout this period following the end of the Persian Gulf War until this directive was issued, the Veterans Health Administration was engaged in the treatment—the treatment—of Persian Gulf War veterans with symptoms to be later defined as Persian Gulf War syndrome.

As Mr. Principi testified on December 16, we acted, "immediately, using authority we now have, because we see an immediate need. But we are also asking the Congress for additional authority."

Mr. Montgomery commended the Department for, "getting ahead of the curve on this issue."

I believe that it is important to recognize that the present Secretary of Veterans Affairs, Mr. Principi, served as Deputy Secretary during our last conflict, and during the intervening period he chaired the Principi Commission on Service Members and Veterans Transitional Assistance. Clearly, the Nation is fortunate to have Secretary Principi, a person who fully and completely understands the health care issues that could arise from the war on terrorism.

In addition the President of the United States has indicated his intent to nominate Dr. Robert H. Roswell for the position of Under Secretary for Health. Dr. Roswell served with me following the Persian Gulf War as the Associate Chief Medical Director for Clinical Programs. Dr. Roswell also clearly understands the potential issues resulting from armed conflict.

But what lesson did we learn from this experience? I believe we were hampered in our efforts to provide health care for Persian Gulf War veterans by not having stand-by legislation available when we needed it. What do I mean? While waiting for the full support of the Congress, we had to spend months waiting to get our expanded program initiated since enabling legislation was required. My one recommendation today is that this committee should see that legislation is enacted that will establish stand-by authority for the Secretary of Veterans Affairs to develop and implement the examination of veterans of the current as well as future conflicts who may have unusual symptoms or complaints, establish specialized treatment programs for these veterans, as well as establish the appropriate registry for tracking purposes.

Based on our experience from the Vietnam War as well as from the Persian Gulf War, it is clear that as a Nation we should expect difficult health care issues to arise in relationship to future combat situations. I believe that the veterans of the future wars deserve to have expeditious care from the Department of Veterans Affairs and that this can best be accomplished by providing the Secretary of Veterans Affairs with authority to establish the appropriate program in a timely fashion as the need arises.

Mr. Chairman, I appreciate the opportunity of appearing before you today.

Mr. MORAN. Thank you very much, Doctor.

[The prepared statement of Dr. Holsinger appears on p. 111.]

Mr. MORAN. Dr. Bailey, welcome.

#### **STATEMENT OF HON. SUE BAILEY, D.O.**

Dr. BAILEY. Thank you. Mr. Chairman, thank you for the opportunity to testify here today.

In my role as Assistant Secretary of Defense for Health Affairs, I was responsible for the Military Health System and was the principal advisor to the Secretary of Defense on health issues, including force health protection.

In deployments in the Gulf War as well as in Bosnia, Albania and Kosovo, the government has gained great insight into the importance of deployment force health protection. Applications of those lessons learned will necessarily include improvements in pre- and post-deployment health assessments, troop monitoring sys-

tems, medical record systems, environmental and biohazard assessments and medical surveillance overall.

Since returning from deployments to the Gulf, many veterans have complained of a variety of symptoms that have come to be known as the Gulf War syndrome. However, to date there has been no scientific verification of a specific syndrome, but both the Department of Defense and the Department of Veterans' Affairs have provided comprehensive medical examinations and, most importantly, treatment for Gulf War veterans suffering any symptom or illness.

There has also been extensive research conducted to determine causes of physical symptoms as yet unexplained. An Interagency Research Working Group continues to explore the potential health effects of deployments, including long-term studies such as an evaluation of the health of service members during and after their military service.

At this time there is no clear evidence of any single environmental factor or health-related exposure that can explain the symptoms and illnesses of these veterans. It is essential that there be improved health surveillance and further research into the combined effects of multiple health-related exposures before and during deployment.

Understanding the effects of deployment begin with baseline health assessments prior to mobilization and continue indefinitely during and following military service. Efforts to obtain these assessments, to access them in the field and record and monitor force surveillance, short and long term, have been hampered by the lack of an electronic health system. Without application of currently available information system technology, it will continue to be difficult to provide for health intervention related to personal health data or to apply epidemiological techniques that are so essential to deployment force health protection.

Appropriate surveillance also depends upon accurate troop monitoring capability. During the Gulf War the location of units was often well known, but the actual movement of individuals within those units was not. Computer models that would have provided invaluable data about health-related exposures were dependent upon accurate troop location information that was not always available. Many service members experienced multiple health-related exposures that can only be fully documented in relationship to their location at any given time.

Mr. Chairman, thank you for the opportunity to testify, and I would be happy to answer any questions.

Mr. MORAN. Madam Secretary, thank you for your time.

[The prepared statement of Dr. Bailey appears on p. 114.]

Mr. MORAN. Dr. Mendez.

#### **STATEMENT OF HON. ENRIQUE MENDEZ, M.D.**

Dr. MENDEZ. Mr. Chairman and members of the committee, I thank you for the invitation to appear before you today.

I am Enrique Mendez, Jr., M.D., Major General, U.S. Army, retired. From 1990 to 1993 I served as Assistant Secretary of Defense for Health Affairs in the Department of Defense.

I understand from your letter, Mr. Chairman, and a subsequent conversation with a member of your staff that the purpose of this hearing is to ascertain whether lessons learned from the Persian Gulf War have been integrated in present day deployments, so my opening remarks were prepared with that objective in mind.

Operation Desert Shield, in response to the Iraqi invasion of Kuwait, commenced in the same year that I became Assistant Secretary and was followed by Operation Desert Storm in early 1991. The clarity of the recollections of the events of those days is affected, in my mind, by the passage of time, but it is also colored by the development of actions that have taken place in subsequent years. Nevertheless, I agree that the lessons learned in the past are indeed important to the way you react and operate in the future and that examination of such lessons is certainly a worthwhile endeavor.

The health-related lessons learned before, during and following the Persian Gulf War can in my judgment be grouped into certain broad categories:

- The need for improvement in the availability of data on individuals regarding pre-deployment health status, exposures during deployment and post-deployment health status.
- The need to improve the recording of medical information at all levels and having ready access to that data. The availability of a health record that includes deployment, immunization and exposure histories; a record that can transition seamlessly from the Military Health System to the Veterans Health Administration.
- The need to communicate health information in a timely and understandable manner to troops, commanders and other leaders, medical personnel and other interested parties. This communication to be inclusive of possible hazards and risks as well as the why of actions aimed at protecting the health of personnel and is to continue with relevant information after deployment.
- The need to improve the identification and evaluation of health risks in a timely manner.
- The need for systematic assessment of symptoms that are not readily explained or undiagnosed conditions, and the establishment of epidemiological studies.
- The need to continue work in developing new vaccines, determining possible long-term effects of exposures and assessing the interactions of multiple exposures.

Many of the concerns and the actions followed in those days, sir, were triggered by the possibility of the use of chemical and biological weapons against our personnel. Recent events further strengthen the need to educate and train health professionals in the diagnosis and care of casualties resulting from the possible use of weapons of mass destruction. As a former medical school dean, I certainly support actions necessary for that to be implemented.

Mr. Chairman, I thank you again for the opportunity to appear before you today.

Mr. MORAN. Thank you very much.

[The prepared statement of Dr. Mendez appears on p. 117.]

Mr. MORAN. Dr. Nicolson.

**STATEMENT OF GARTH NICHOLSON, PH.D.**

Mr. NICOLSON. I am Professor Garth Nicolson from the Institute for Molecular Medicine in Huntington Beach, and I guess I represent private researchers involved in studies on Gulf War Illnesses.

I did deliver written testimony to this committee. Somehow it ended up in a building in Virginia, and didn't quite get over into the committee, but it can be downloaded from our website as well as the publications that I would like to discuss today on ALS and the Gulf War family study.

We believe that there were multiple toxic insults, including chemical, biological and, in a few cases, radiological exposures during the Gulf War that led to chronic illnesses with relatively non-specific signs and symptoms. We don't think there is a separate Gulf War Syndrome. We think these illnesses can be explained, as we published more than 6 years ago, by calling them chronic fatigue syndrome or fibromyalgia syndrome; and I am delighted to see that the various agencies involved in studying this have accepted those two diagnoses for Gulf War victims.

I want to focus today on biological exposures because I feel that these were very important in a subset of Gulf War veterans; and, in particular, we are very interested in some of the autoimmune disease that may have resulted from these exposures.

In studies of over 1,500 United States and British veterans with Gulf War illness it has now been found not only by our laboratory but by the University of Texas at San Antonio and two other commercial laboratories that approximately 40 to 50 percent of these Gulf War illness patients have an invasive bacterial infection called mycoplasma, and this is compared to probably 6 percent in the unvaccinated, nondeployed population. This has been confirmed in a large VA trial called the VA Cooperative Clinical Program No. 475. Those studies were conducted at the University of Texas Health Science Center at San Antonio, and again they found 40 percent of the Gulf War veterans from 30 VA hospitals around the country showed evidence of this mycoplasmal infection.

What we found in the Gulf War veterans that really distinguishes them from civilian illnesses, chronic fatigue syndrome and fibromyalgia syndrome, was the presence of a particular species of mycoplasma called *Mycoplasma fermentans*. More than 80 percent of the Gulf War veterans who were positive for this type of infection had had only this one species, but that is not what we see in civilians, although 60 to 70 percent of civilians with chronic fatigue syndrome have a similar infection. We see a variety of different species of mycoplasma in those civilians. So we think there was something unique about the exposures during the Gulf War.

Similarly, in studies that we were involved with in Europe, we found the same situation, more than 60 percent of European chronic fatigue syndrome patients also showed evidence of this infection, but most of those patients have another species, *Mycoplasma hominis*. So there is something unique about the Gulf War.

We started studying family members who came down symptomatic after the Gulf War, and we have a publication that is in press in the *Journal of Chronic Fatigue Syndrome* where we have studied family members. These family members were chosen from

the 40 percent of the Gulf War veterans who were positive for mycoplasmal infections.

We examined military families or 149 patients, which included 42 veterans, 40 spouses, 32 other relatives and 35 children, with at least one family member complaining of illness, selected from a group of 110 veterans with Gulf War illnesses. In 107 family members, there were 57 patients, or 53 percent, that had essentially the same signs and symptoms as the veterans and were diagnosed with either chronic fatigue syndrome or fibromyalgia syndrome. Most of these patients, or 72 percent, had the same specie of infection that we found in the Gulf War veterans.

So they didn't look like the civilians with chronic fatigue syndrome that have a variety of different species of mycoplasmal infections. The family members had the same infection that we found in the Gulf War veterans, and there was a significant difference between not only healthy members and sick members in these families studies but even within individual families there was a significant difference between the patients that showed no symptoms and the presence of this infection and the patients that showed symptoms who had this infection.

Again, that is in press in the Journal of Chronic of Fatigue Syndrome. It can be downloaded from our website.

Next I would like to talk about ALS or Lou Gehrig's disease, and I am sorry that the congressman had to leave who was interested in what may have happened at Kelley Air Force Base. We are not only interested in what happened at Kelley Air Force Base but also at a number of other bases around the country where there are unusual instances of Lou Gehrig's disease or ALS. I don't think there has been an adequate study of this topic.

We have been studying ALS in Gulf War veterans, both British and U.S. Veterans and a few minor number of Australian veterans, to see if they have the same types of infections that we found in 40 percent of the veterans with Gulf War Illness. Only in the case of the Gulf War veterans with ALS, we found 100 percent of those veterans had the same infection (*Mycoplasma fermentans*) with only one exception, one Australian veteran who had an infection with *Mycoplasma genitalium*, a very similar type of infection but not the same as *Mycoplasma fermentans*.

ALS is a very serious, uniformly lethal disease. It is a complicated disease. It has a genetic element, and we don't understand all the aspects of this, but we feel that mycoplasmal infections are one of the important elements in ALS. Because even in the civilian population that has ALS, we find that 85 percent of those patients have the same class of infection. Although in civilians not all of them have *Mycoplasma fermentans*, they have many other mycoplasma species. But again in the Gulf War veterans almost all ALS patients have *Mycoplasma fermentans*.

My last comments are directed at the vaccines. Because there is a strong association between Gulf War illnesses and the multiple vaccines that were administered to British and U.S. Veterans, and there are a number of studies now in the medical literature on topic.

I will just mention one, conducted by Dr. Lea Steele from Kansas, who examined Gulf War illnesses in nondeployed veterans



from Kansas who had been vaccinated in preparation for deployment and compared these to nondeployed veterans who were not vaccinated, and they found higher evidence of the symptoms that very much looked like Gulf War illness.

They also did another study where they examined deployed Kansas veterans, and they found a much higher rate of chronic illnesses in those deployed veterans compared to nondeployed veterans, and this has also been found in VA studies and other studies that have been conducted.

We think that the multiple vaccines, at least some of them, the experimental vaccines, may have contributed to this problem. The reason for this really comes from a publication in the *Journal of Vaccine* where 6 percent of commercial vaccines were found to be contaminated with mycoplasmas. So this is a commonly found contamination in vaccines.

Why did it show up in the Gulf War? Well, we think because they received multiple vaccines all at once, within a few days, sometimes as many as 20 or 25 different vaccinations, and this could have immune suppressed them; and it is very well known that multiple vaccines can cause immune suppression.

In addition, the chemicals they were exposed to in the Gulf could also have contributed to immune depression, and even minor contaminants in a vaccine that might not affect a healthy person under those circumstances could hurt them.

Now, I have gone over my time, so I will be glad to answer any other questions about the possible origin and why we feel that the Department of Defense and Department of Veterans' Affairs has not been completely candid about this subject.

Part of it goes back to a U.S. Patent which was given to an Army pathologist, Shyh-Ching Lo, and the title of that patent is "Pathogenic Mycoplasma," and it is the patent for *Mycoplasma fermentans*. So essentially the same infection that we found is a U.S. Army patented infection. The question is, how did it end up in our Armed Forces?

For years at the USUHS, or Uniformed Services University of Health Sciences, people who were preparing in medical school to practice in the military were taught that these infections were very, very dangerous. Contrary to what Dr. Steven Josephs and others have testified to Congress and sent information to Congress stating that these infections were not pathogenic, that these infections were not causing disease and were not a problem, actually medical students at USUHS were taught completely opposite of those misleading statements.

Also, the word coming from the Armed Forces Institute of Pathology where these infections have been shown to be lethal in man and in nonhuman primates was completely contrary to testimony of officials from the Department of Defense.

So I will be glad to discuss that.

Also, in my testimony in 1998 to this committee I listed four or five different things that I felt should have happened, and I would love to give a rundown on if those have ever happened or not. Thank you.

[The prepared statement of Mr. Nicholson appears on p. 119.]

Mr. MORAN. Dr. Nicolson, one of the questions that I have tried to pose and will pose in writing to the Department of Defense is what were the protocols during the Persian Gulf War for deployment related to vaccinations and immunizations and what are they today in the deployment during Enduring Freedom and are we doing something different today than we were then or are we simply replicating past vaccination immunization procedures.

And, Dr. Bailey and Dr. Mendez, if you would be so presumptuous as to advise those who currently occupy the positions you previously held, what in short summary would you suggest to your counterparts today that they should be doing in regard to preventative measures in regard to this deployment?

Dr. BAILEY. Well, I, first, would like to commend someone who was part of the war in Kosovo, General Wesley Clark, who allowed me and my team in both predeployment into Albania and then into Kosovo. And I say that because it is by way of saying we were very intent upon not repeating any errors that may have been made or any of the protocol that may have been less than perfect in terms of medical surveillance, for instance.

General Clark, by allowing us in, it meant that we had our occupational and environmental specialists there on the ground immediately in Albania, weeks before the entry into Kosovo. I was there and stood on the tarmac as they prepared those forces, and we looked at everything from the pesticides being used, the way they were being used, whether they were recorded or not, whether, for instance, on the tarmac they would in the Gulf and in other wars try to keep the dust down because we know that particulate matter can be very dangerous, but in doing so they had used an oil-like substance which we felt also could be an environmental hazard in the Gulf War. So we were able to inquire and affect the way in which we controlled the dust there. In fact, they were using water but adding a surfactant which dealt with the surface tension and theoretically would have been better than just water.

So it is those kinds of specifics that were looked at because General Clark and others as part of the Armed Forces and at the Department of Defense are concerned about medical surveillance and environmental protection, that we changed those kinds of elements and made sure we were not only affecting a healthier environment for troops but also recording them. So there have been things specifically that were done.

I would also add that it is essential that we do appropriate medical surveillance not only of the health status of those coming into a deployment during and after but also because we need to know if in fact there has been, for instance, a biologic attack. As you know, our ability to provide detection is still at this time relatively limited, and therefore we need to know in theatre if in fact there are illnesses which are not at the average adenoviruses or viruses that may be striking but in fact we have been attacked days before.

So real-time medical surveillance is essential and was going on in those deployments and in Bosnia as well where I also saw decontamination sites that we were able to identify as absolutely necessary at our field hospitals and at the hospitals there in Bosnia.

So I would say that much has already been done and more needs to be done to be certain that we are doing a better job of recording

what is going on, effecting it at the time, and it is so essential that we also record it.

Dr. MENDEZ. To continue with the thought on surveillance, I suggest that the material that is gathered from information on individuals, has to dovetail with other materials in the clinical record of the patient so that eventually we have the totality of the picture of that individual in order to ascertain something that has indeed bothered the committee, namely the matter of exposure; the when, where and so on of that exposure. Further, within the research that goes on in the Department, particular attention should be paid to the matter of multiple exposures.

As it has been alluded to here today—by multiple exposures I am talking not only about exposure to toxic substances but also exposure to substances that are used for certain preventions, such as pesticides, vaccines and so on, so that you can make correlations in terms of symptomatic expressions and the matter of multiple exposures.

I believe it is important in the whole matter of surveillance to educate; to educate not only the soldier, but also to educate ourselves, the physicians and the rest of the medical personnel. We have had particular orientation to casualties; the care of that casualty, the evacuation of that casualty, the stabilization and so on—and that is indeed good, but I am talking about the need for balance between that orientation and what we have discussed here about preventive medicine, risk communications and the maintenance of health. I think all of these are pieces of force health protection, and their integration is a necessity if these programs are really going to be productive.

That is all for now, sir.

Mr. MORAN. Thank you very much. Dr. Filner.

Mr. FILNER. Dr. Mendez, Dr. Bailey, did you hear the information I asked for from Ms. Embrey about the vaccination records? Are those available and can they be provided, from your experience?

Dr. BAILEY. One of the problems we had following the Gulf War was obtaining that kind of data. I have personally stood in warehouses and looked through boxes, looked for red crosses on boxes, looking—

Mr. FILNER. So it is not as easy as she suggested?

Dr. BAILEY. We had to go through military logs to see if we could find information that would have—

Mr. FILNER. The reason I am asking, if Dr. Nicolson is correct that the infection might have been carried within these vaccines, wouldn't it be important to figure out if that was correct?

Dr. BAILEY. I think we are in a new generation of force health protection today, and it is a new generation. We have turned a corner here that has not been turned probably since the Civil War. I think medical records have been kept, as I used to say, in a stubby pencil way since that time and since the Middle Ages—

Mr. FILNER. We have requested this kind of information, and we have never been able to get it. I requested it again, and Ms. Embrey said she is going to get it for me. I hope we get it.

Did Dr. Nicolson have published papers and theories or grant requests when you two were involved?

Dr. BAILEY. Let me back up and answer your question. The answer is an electronic medical system that needs to be paid for, appropriated, and installed. That would solve the problem. So we would have the appropriate records.

Dr. MENDEZ. In my case, Dr. Nicolson published after I had left. I just checked with him as to the timing.

Mr. FILNER. I have read some of your work, Dr. Nicolson, and you didn't go through it today, you didn't have time, but you also have a protocol of treatment based on your theory of what has gone on and, as I understand it, those treatments have been very effective.

Mr. NICOLSON. Yes. In fact, several people from your district have been successfully treated.

Mr. FILNER. I saw a couple who were dying literally and were going through the treatment that Dr. Nicolson prescribed and are now fully functional. He has described that in thousands of cases, if I am not mistaken, but you can correct me if I am wrong.

Mr. NICOLSON. I don't think it is thousands, because we don't have the resources to study thousands, but we certainly have published in small sets of patients the results, and those results were finally taken very seriously by the VA. They went over our data and also data from some VA physicians in certain VA hospitals that had embraced our ideas and were treating patients and getting successes like Dr. Victor Gordon who has hundreds of patients whom he had successfully treated using our protocols.

This formed the basis of Cooperative Clinical Program Number 475, which was a very simple treatment program, doxycycline, 200 milligrams per day, versus placebo in a blinded study for 12 months, and that trial has been completed although we haven't seen the results yet but I am not confident of the VA's ability to conduct this trial.

Mr. FILNER. So your treatment is being taken seriously. I know that for many years it was not.

Mr. NICOLSON. Correct.

Mr. FILNER. I mean, there was this refusal to even look at your theories or your treatment.

Mr. NICOLSON. We were actually ridiculed. We know that. So it has been a long, difficult struggle for us, but we started in this as a family situation because our daughter served in the Gulf War in the 101st Airborne Division as a crew chief in the Black Hawk helicopter and came back from the deep insertions into Iraq and slowly came down with these nonspecific signs and symptoms while at Fort Campbell training to be a pilot and she couldn't ever complete her pilot training because of these illnesses.

Mr. FILNER. You have the credentials of an established researcher and teacher and clinician, and they had nothing successful, and yet they refused to look at your stuff. I just could never understand that, and it leads to my skepticism when I hear some of the earlier testimony.

I mean, you may be wrong, but you at least thought you had proved an effective treatment. It would seem to me that the established authorities ought to have grabbed it and studied it and jumped on it.

In my view they may have been using the mycoplasma to develop an antibacterial warfare vaccine, and it got introduced into the vaccines that were being given, and so, as I just said earlier, friendly fire may have caused all of this, and that would explain why there would be resistance to looking at the truth.

I don't know if my conclusions come from your work, but it is a possibility, as I understand it, and we ought to trace it down. National security involves the truth here as far as I am concerned.

Mr. NICOLSON. Congressman Filner, as you know, this has been a long struggle for us, and it doesn't explain all the Gulf War illness, and this is one thing we have been criticized for. We only find this in a subset of patients, but these were patients, by and large, that were exposed to a lot of toxic materials and this being one element of that toxic exposure that we think can explain illness in a subset of patients, particularly the patients who spread their illnesses to immediate family members. This we found often, and I just could not believe the denial that has been going on for years that these illnesses couldn't be passed to family members. Because we found the same signs and symptoms, the same infection in family members, and they responded the same way to our therapeutic protocol. These are spouses, children, and other family members. So this is what I couldn't believe, their absolute denial that something like this could be transmitted.

It is even worse than that because we are now afraid that our blood supply might be at risk. There is a study that will be published soon in the *Journal of Chronic Fatigue Syndrome*—I am an associate editor of that journal, so I know this publication will be coming out soon—that shows that 6.4 percent of Belgium chronic fatigue syndrome patients came down with this condition after a blood transfusion. I am sure this is a problem because there is a certain percentage of carriers among apparently healthy people. We have been very interested in that.

The one thing that characterizes a carrier, that is, a person that might have the infection but be nonsymptomatic, is the fact that we can't detect other additional infections in carriers, but when we start to look at symptomatic patients, for example, with chronic fatigue syndrome, we almost always find multiple viral and bacterial infections. It could be if you have one infection you might be able to withstand that, but if you are exposed to chemicals, other infectious agents or other toxic materials you may succumb to that type of infection. If it compromises your immune system, you may succumb to that type of infection.

Mr. FILNER. My time is up, but can you give us those five things again that you recommended back in 1998? We will submit that to those agencies to see if they have done any of them.

Mr. NICOLSON. There were five items that I listed at the end of my testimony to this committee in 1998, and I wanted to see if any of these have been addressed in the intervening period of time.

The first one was that we must correct the notion that immediate family members cannot contract illnesses from veterans with Gulf War illness. Denial that this has occurred has only created a serious public health problem, including the spread of illnesses to the civilian population and potential contamination of our blood supply. I have to remind the committee that much of the blood that is put

into the national blood supply comes from the military. There was a hold immediately after the Gulf War on donations from military personnel if they had served in the Gulf, but as far as I know that was removed within 6 months or less than a year, and it has returned back to the normal situation. So here we have a situation where these contaminants could be introduced into the blood supply.

I mentioned the European study on this. We should institute immediately a study in the United States similar to this European study that showed that chronic fatigue syndrome can result from a blood transfusion.

The second item was I was critical of was the diagnostic system used by the Department of Defense and Veterans' Affairs to determine an illness diagnosis, and I suggested that that be replaced by an international system called the ICD-10 system of diagnosis. There is a category for chronic fatigue syndrome, the so-called G93.3 category, that can be used to diagnose chronic fatigue syndrome.

Well, this is one item that I think has been changed recently. They now are accepting the diagnosis of fibromyalgia syndrome and chronic fatigue syndrome, first described and published by us as a way to describe the condition of Gulf War illness within the VA system. So I think that this is a step in the right direction.

The third item was denying claims and benefits by assigning only partial disabilities due to post-traumatic stress disorder should not be continued. At the time, patients were being rushed into a diagnosis of post-traumatic stress disorder without careful consideration that other exposures could lead to other illnesses besides this one. We had complaint after complaint after complaint, year after year after year of active duty Armed Forces personnel and retired Armed Forces personnel being given a diagnosis of this. Now, I would hope this has been changed recently.

Number four was research efforts must be increased in the area of chronic illness. Unfortunately, Federal funding for such illness has often been rebudgeted or the funds often removed.

The classic case that I used in 1998 was Dr. William Reeves of the CDC in Atlanta who sought protection under the Federal Whistle-Blowers Act after he exposed misappropriation of funds allocated to work on chronic fatigue syndrome at the CDC. Essentially, those funds disappeared or were reallocated.

It is estimated that approximately 3 percent of the adult U.S. Population suffers from chronic fatigue syndrome or fibromyalgia syndrome. So I think this is a very important illness category, and Congress recognized this, and Congress appropriated funds, but somehow those funds never quite made it to the researchers like ourselves that were trying to study this process.

Finally, the last item which you have been touching upon is that past and present senior Department of Defense and VA administrative personnel must be held accountable for the entire Gulf War illness mess that we found ourselves in after the war and persists up until this day. And the reason for this is that there will be future deployments. We will be going to war again, and just as we have seen now, we will have to straighten this out so that history doesn't repeat itself. We have seen that there are illnesses associated with

deployment in Bosnia, and I am sure we may see this again. So we have to make sure, absolutely sure, that we solve this problem of what happened during the Gulf War to prevent future occurrences of just the same kind of problem that we faced and failed to correct for over a decade.

Mr. MORAN. Thank you, Doctor. Dr. Snyder.

Mr. SNYDER. Dr. Holsinger, I don't understand your comments about enabling legislation, when you were in the Department that you had to wait months before you could institute treatment programs for enabling legislation. Why can't the Secretary just say, well—obviously, clinicians are going to be treating them. They are going to see patients. You don't have authority to set up some kind of a registry. I don't understand.

Dr. HOLSINGER. I will be happy to explain that. Part of the problem we historically had going through the Agent Orange issue was the need to have legislation that would allow us to treat individuals who were nonservice-connected for Agent Orange exposure. When we came out of the Persian Gulf War, when we first began hearing about the Persian Gulf War illness, or syndrome as it was called at that time, we had no legislative authority. I issued a memorandum of—

Mr. SNYDER. No legislative authority to see veterans who did not have service connection who were not otherwise eligible for VA health care?

Dr. HOLSINGER. Correct. So what I did was to direct that we would treat anyone claiming Persian Gulf syndrome the same way we treated individuals who claimed exposure to Agent Orange but who had no—there was no direct cause and effect connection at that point in time. So we had no disease entity for which we were authorized to treat an individual as an outpatient, for example.

Mr. SNYDER. So you are suggesting that there ought to be legislation authorizing the Secretary of Veterans Affairs through some kind of public notification to say—

Dr. HOLSINGER. I think he should have standby authority when this occurs in the future to be able to act.

Mr. SNYDER. Would it be kind of like a temporary service connection or—

Dr. HOLSINGER. It doesn't have to be service connected. It simply has to be that he has the authority to treat such an individual who claims this type of exposure within the treatment system. What we moved to do was to try to get around this problem, and I take a certain amount of umbrage with my colleague on the far left who indicated we didn't do anything when in fact we did. I spent 15 years of my career in the VA wrapped around the Agent Orange axle. I put out the directive that we would take care of these veterans early in the game when we first heard about this because I didn't want to have another agent hung around our neck for the next 15 years. I found out the next day that the Deputy General Counsel of the VA was sitting in the Secretary's office demanding that I retract the directive because I did not have legislative authority to issue it. My point was there was no law that said I couldn't, and since there was no law that said I could, why couldn't we? The answer was, well, because the law doesn't work that way.

I am not a lawyer. I am just a dumb physician. I think you take care of patients. And the issue was that the law works by having legislation enacted that authorizes you to do things. I didn't have such a law. So we finally resolved the issue in the Secretary's office by the Secretary recommending that we write a rule since there was no law either way, and we operated under a rule for months.

It just so happened that prior to the time I went to see the Secretary, I had a phone call from Congressman Sonny Montgomery, who was chair of this committee at the time, who was home in Jackson, and he said, "Jim, that was one of the smartest things you've ever done." he said, "I am pleased with what you did." That is why in our hearing later he said we were ahead in this game. Because we were, we were treating the patients from the very beginning in the VA. But he said if you need a law, I will get it for you, and it was on that basis that we ended up with the hearings and we got legislation and were prepared to move immediately to handle it. But if we had standby legislation for the Secretary to be able to issue those kinds of rules immediately upon understanding that there is an issue out there, you could move very quickly to move such veterans into the treatment queue and not have issues of the Inspector General telling you that you were erroneously treating veterans and wasting the taxpayers' money, which happened to me multiple times when I was in VA.

Mr. SNYDER. Thank you. Dr. Nicolson, correct me if I am wrong, do I hear you say that you are now satisfied that there isn't now an ongoing trial with sufficient numbers to test your protocols?

Mr. NICOLSON. Yes.

Mr. SNYDER. That was funded through the VA?

Mr. NICOLSON. As a joint DOD-VA clinical trial.

Mr. SNYDER. I got the impression that when you said you were ridiculed that implies you had applied for Federal funding in the past for your research. What was the earliest time that you applied for funding from some Federal body?

Mr. NICOLSON. I believe that my first application was in 1995 and again in early 1996.

Mr. SNYDER. And just my last question. You don't have to go into any detail about this. Do you have any reason to think that anyone who is evaluating your applications has some kind of a conflict of interest?

Mr. NICOLSON. I don't know if that is the case or not. I do know that the funding line was drawn precisely above my application, and this happened more than once. In fact, it was the subject of a GAO investigation to see if there was anything that they could find that was not correct or inappropriate about the review process, and I don't think they were able to get the information that they needed to come to a conclusion.

Mr. SNYDER. You haven't reached any conclusion in that regard?

Mr. NICOLSON. I have my own personal conclusions. I think it was stonewalled. I think there were just too many things in what we were studying that pointed back to the Department of Defense.

Mr. SNYDER. That is a different answer. The question I asked was do you think that anyone who reviewed your application had a conflict of interest?



Mr. NICOLSON. I don't know. It is not just the scientific review process but also the process of administrative review after peer-review that can adversely affect a grant's priority score. This may have resulted in the over abundance of grants awarded for psychiatric studies on Gulf War veterans.

Mr. SNYDER. Thank you for your time.

Mr. MORAN. Secretaries, thank you for joining us, thank you for your past service to our country and your testimony today and, Dr. Nicolson, thank you for your interest in this topic. We may have some follow-up questions for you all as well.

Our final panel, if they would join us. Steve Robinson, the Executive Director of the National Gulf War Resource Center; Patrick Eddington, Associate Director of Government Relations for the Vietnam Veterans of America; and Paul Hayden, Associate Director for Legislation for Veterans of Foreign Wars.

**STATEMENTS OF STEVE ROBINSON, EXECUTIVE DIRECTOR, NATIONAL GULF WAR RESOURCE CENTER, INC.; PATRICK G. EDDINGTON, ASSOCIATE DIRECTOR OF GOVERNMENT RELATIONS, VIETNAM VETERANS OF AMERICA; AND PAUL HAYDEN, ASSOCIATE DIRECTOR OF LEGISLATION, VETERANS OF FOREIGN WARS**

Mr. MORAN. Mr. Robinson, if you would start out off this panel, I would appreciate it.

**STATEMENT OF STEVE ROBINSON**

Mr. ROBINSON. Thank you. I would like to start out by thanking the chairman and the members for this opportunity. So often we don't get to hear the voices of the veteran advocate on this issue, and it is very pleasing to be here.

I am going to try not to read directly from my testimony but talk to you. I want to throw out a word, spin, and I have heard two different statements from two different experts on the DOD and VA side. Both of them say—and they always say this. They will say there is a specific cause, they cannot say a specific cause linked to a specific disease, and the other statement I heard was at this time there is no single cause for what we call Gulf War illnesses. That is spin. Let me tell you why. We will never find a single cause for Gulf War illnesses. It is a multitude of things. It is going to be more than one single factor that is figured out. There are many researchers that are doing independent work that are on track. Now I will step into a little bit of my statement.

More than a decade ago U.S. Forces were deployed to fight a war that would be won in a matter of hours rather than years, and the speed of battle and the technology that was deployed ensured our success as we achieved our objectives. Generals were lauded as heroes and soldiers returned home to parades and fanfare. Many soldiers left the military immediately and others continued to serve. Not long after the Gulf War ended, veterans believed they were ill as a result of their service in the Gulf War. The President of the United States and the Department of Defense made a critical decision at this moment in time that I believe will be soon the most studied and dissected decision of my generation. The leadership of our Government had to choose what to do, to tell the truth about

the events that occurred to Gulf War veterans or to begin a long protracted public affairs campaign designed to delay the truth, control the story, and to fund the coffers of Beltway contractors.

You have heard it here today, "It is all in your head." The lessons learned from the Gulf War today are still it is all in your head. To understand what we have learned we first have to understand what we believed prior to the Gulf War, troops, equipment and intelligence. What we believed then, we believed we were the best trained, best equipped army in the world and that we should expect 60 percent casualties when we went into the breach. That is what they were told. The Iraqi army was the third largest army in the world. That is what we believed. What we know now, our leaders were given overstated intelligence assessment about the Iraqi army and the threat. We went to war with defective chemical suits. Chemical and biological agent alarms were purchased and sent to the field even though it was known in 1988 that they did not work. The fox vehicles capabilities were not fully understood before the deployment and Khamisiyah was a known chemical weapons storage facility prior to the Gulf War.

That is what we know. Under biological weapons and our preparedness, what we believed then: Anthrax, botulism and other weapons of mass destruction will be used offensively against you, us. Therefore we should inoculate our forces to protect them and we are not going to tell our soldiers about what shots they are getting. We are going to violate all standing policy on the use of investigational new drugs because here at the DOD we know what is best for soldiers.

What we know now: It is not rational to inoculate for every perceived threat or strain of biological agent or chemical weapon. Usually inoculations occur when you intend to use a weapon offensively because it is almost certain that some of it will come back onto your own forces. The decision to give the U.S. Forces the anthrax vaccine made no sense. The vaccine was only approved for cutaneous anthrax and is still not FDA approved for inhalational anthrax use.

This experiment continues today on postal workers who must waive their rights should they need to sue someone if they have a severe systemic reaction to this vaccine. We know that the Department of Defense is so far into bed with Bioport it doesn't matter how many times Bioport deceives the Nation, fails inspection and harms soldiers. DOD will be there for the former Joint Chiefs of Staff and its foreign-owned company.

We also know that pyridostigmine bromide as a pretreatment for Sarin exposure was also an experiment. Conventional wisdom says you don't give healthy people a drug designed for sick people. That is just my common sense analogy.

These and other decisions are what I would like to call the Black Beret factor. The Black Beret, you know, was a big stink. I am an Army Ranger. The Black Beret factor is the suspension of common sense, regardless of all conventional wisdom, and the implementation of policy even though it is in violation of standing law or directly harms the end user.

Under research, investigations, and turning stones, what we believed then: We believed DOD would look into what happened to

Gulf War veterans and provide accurate reports that were sound in methodology and investigational practices. We believed DOD would fund studies and research that would seek to find answers, and we believed they would be forthcoming in revealing any intelligence that would unravel the mystery of Gulf War illnesses. We believed that no stone would be left unturned. We believed that the mistakes made during the Gulf War would result in lessons learned that would be implemented to protect soldiers in future conflicts to come.

What we know now: DOD's investigational methodology is suspect and it leans away from the veteran. In doing so, the veteran has suffered for the last 10 years, waiting to be recognized and compensated fairly for their injuries. We know that the vast majority of research conducted was funneled to Beltway contractors who realized the gravy train the investigation would produce. We know that independent research was crushed, stalled, demonized, and ridiculed by the Office of the Special Assistant for Gulf War Illnesses. We know that DOD has not been forthcoming in revealing the important intelligence matters of the Gulf War as they begin to conclude the Gulf War investigation.

There are several areas of intelligence and investigation they have eventually ignored, and we know they did not turn every stone. They turned selected stones. We also know that DOD is not implementing the lessons learned from the Gulf War that were passed into law, and this blatant disregard for their own policy right now endangers soldiers who are called to deploy into hazardous areas around world where chemical and biological agents may be used in a time of war.

We know that the truth will come out. It always does and the recent events of terrorism that have catapulted us into this new world is a place where truth is the most important public affairs tool available.

America is stronger than most people understand. We can withstand looking at our mistakes and learn from them. For Vietnam veterans it has taken 30 years. For Gulf War veterans we are at 10 years and counting. The charge I would like to leave with the committee today is please invest in the truth today so we can protect the soldier of tomorrow.

Thank you.

[The prepared statement of Mr. Robinson appears on p. 130.]

Mr. MORAN. Thank you. Thank you very much, Mr. Robinson. Mr. Eddington.

#### **STATEMENT OF PATRICK G. EDDINGTON**

Mr. EDDINGTON. Mr. Chairman, members of the committee, thank you very much for providing Vietnam Veterans of America the opportunity to be here today to provide our views on lessons learned or lessons unlearned from the Gulf War as they may be. I have a statement for the record, Mr. Chairman, and I would ask that it be included without objection.

Mr. MORAN. So ordered.

[The prepared statement of Mr. Eddington, with attachment, appears on p. 135.]

Mr. EDDINGTON. Thank you. It would be difficult for me to top what Senator Riegle said during his presentation. I am biased. My wife worked for Senator Riegle during the Gulf War illness investigation in 1994. So I will confess to that, but I want to present this subcommittee with some evidence that the problems that Senator Riegle described as being exigent in 1993 and 1994 are still with us today.

Let me briefly start with the DOD side of the House. We have had testimony today from numerous witnesses from the Defense Department indicating that things have changed, that they are doing a better job of keeping track of deployment-related medical issues and concerns, and I think that DOD's own pre and post deployment health forms really put the lie to that notion, Mr. Chairman. I have here DD Form 2795, which is the official predeployment health assessment form used by the Department of Defense, and what is fascinating about this form is what it doesn't ask. There is no space on this form whatsoever for mandatory vaccinations such as the anthrax vaccine. There is nothing on here about that whatsoever, and that is significant for a number of reasons.

In 1998, the National Defense Authorization Act explicitly required the Defense Department to do pre and post deployment health examinations, full-blown physicals, to include blood draws on anybody who is going to be deployed outside the United States in a combat theater of operations. Based on conversations that I have had with Steve Robinson and some of the data that that we have been digging up at VVA and talking to veterans or family members thereof who have been deployed, it is not happening. The blood draws are not taking place, and that is absolutely vital when we talk about these vaccines because if we go down the road and we ultimately find that some of these vaccines are responsible for causing illness and that data is not properly entered into the medical record of the veteran right up front, trying to establish service connection for that down the road becomes virtually impossible.

That is one of the massive lessons learned from that, from the entire Gulf War experience, and that simply is not happening. You can take a look at any of these forms, and I will be happy to provide copies to your committee for your complete review, but what is really damning as far as we are concerned is that they do a better job of keeping track of the vaccinations for service dogs than they do for the veterans themselves. We have got rabies, distemper, hepatitis and leptospirosis. On this form they are covering all their bases there, but when it comes to the veteran, his or herself, it simply is not happening.

That is just one example. There are many, many others. Some of my colleagues will undoubtedly talk about the government Computer-based Record Initiative that DOD and VA have had in place for years, which has gone nowhere in terms of trying to create a unified medical record that would be with the service member throughout his or her entire life, to include their time as a veteran. That is an area that still needs a lot of work. But I want to touch briefly on some of these other issues that have been brought up as they affect the VA.

In her written statement Dr. Murphy alluded to these little green and white cards, these health risk assessment cards, military service history cards that are being produced by the VA's Office of Academic Affairs. This is a wonderful product. We love these things. The problem is they are not getting out into the VA system as a general rule. They are simply not making their way out. We know this because when we go to medical conferences sponsored by the VA we have an annoying tendency to take these things with us and ask the VA personnel from across the country have you seen any one of these? And we usually get blank looks.

So we commend the VA for trying to do something about the problem, but there is no fundamental management follow-through. We would suggest that you need to have a directive essentially issued by the VHA to make sure these are in use by every clinician and every medical provider throughout the entire VA medical system.

That gets back to this whole concept of what Dr. Garthwaite, the former Under Secretary for Health at the VA, described at the Veterans Health Initiative. It is a great vision. It is a wonderful vision. It puts this kind of thing at the core of what the VA is supposed to be doing. The problem that we have found is that there is no genuine implementation. It is simply not happening across the system, and in fact from our standpoint, as we made clear in our written statement, which I won't rehash here, we think there is some fundamental resistance within the Veterans Health Administration, their senior leadership, in making this an absolute maximum priority, and for Vietnam Veterans of America we have encountered this with the latest chemical exposure controversy to affect American veterans, and that is the Shipboard Hazard and Defense Program, which was the DOD chemical and biological warfare testing program on American ships during the 1960's. This problem has been dragging on for the last 5½ or 6 years, and to give you a sense of why we are so frustrated with it I have attached to our testimony an e-mail, an internal VA e-mail generated by the Chief Officer of Public Health and Environmental Hazards from September of 2000, in which she essentially says that they don't want to do a directive to the field on SHAD, they don't want to go down the road of establishing a registry for SHAD veterans, et cetera.

We don't understand Dr. Mather's full reasoning on that because her full reasoning was redacted in the FOIA, but I would suggest that the committee follow up, if I may, to find out why we are continuing to have these kinds of problems and reluctance on the part of the leadership to pursue these issues in an aggressive fashion.

I see that my light is on. I will simply conclude by saying we have a long way to go in terms of getting the kind of medical record keeping we need to help prevent the kinds of problems that happened to Gulf War veterans, and I urge this committee on behalf of the fathers and mothers of Gulf War veterans, many of whom served in Vietnam, to aggressively follow up on these problems.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Eddington, with attachment, appears on p. 135.]

Mr. MORAN. Thank you. Mr. Hayden.

**STATEMENT OF PAUL HAYDEN**

Mr. HAYDEN. Thank you, Mr. Chairman. On behalf of the 2.7 million members of the Veterans of Foreign Wars of the United States and its Ladies Auxiliary, I would like to take this opportunity to thank you for including us in today's hearing. We appreciate that after 11 years the Veterans' Affairs Committee's interest in the health and well-being of our Nation's Persian Gulf War veterans has never wavered.

In their 1998 report, your colleagues in the Senate stated that the Gulf War experience can be seen as a microcosm for continued concerns regarding our Nation's military preparedness and ability to respond effectively to health problems that may arise after deployments. We agree.

Further, in our opinion the most grievous finding was a failure of both agencies to collect information adequately about, keep good health records on, and produce reliable and valid data to monitor the health care and compensation status of Gulf War veterans who were ill following their deployment to the Persian Gulf. As a result, basic research questions could not be answered and thousands of Persian Gulf War veterans continue to suffer from undiagnosed illnesses.

We concur with the Chair of the IOM Committee on Strategies to Protect the Health of Deployed U.S. Forces that while the accomplishment of the mission will always be the paramount objective, soldiers must know that their health and well-being are taken seriously. Failure to move briskly to incorporate these lessons learned, such as improved medical surveillance, accurate troop location, exposure monitoring, will only erode the traditional trust between the service member and the military leadership and could jeopardize the mission.

Taken at face value, it would appear that DOD through the Office of Special Assistant for Gulf War Illness, Medical Readiness and Medical Deployment has begun to address its past problems by implementing lessons learned. We believe it important to note, however, the recent finding by the Institute of Medicine in its report, "Protecting Those Who Serve," the recommendations of which we concur, which stated few concrete changes have been made at the field level. The most important recommendations remain unimplemented despite the compelling rationale for urgent action.

Additionally, a January 8, 2002, *New York Times* article seems to back that finding. A Pentagon official in Deployment Health described the new mindset in military health care as trying to train people to ask questions, which is a change in military culture. Senior leaders need to understand that there is a major shift.

While OSAGWI, or the Office of Special Assistant for Gulf War Illness, and DOD have received input from numerous expert panels and have sought to implement changes based on lessons learned, it is our opinion that they have failed to carry out DOD-wide changes in an effective and efficient manner. We believe that only a total commitment from the highest levels of DOD coupled with aggressive Congressional oversight can ensure swift enactment.

Up to this point our testimony has focused primarily on DOD, and rightly so. As we have heard today, in order for VA to properly care for and compensate a veteran, it depends on accurate and

timely information from the veteran's military health care record. We believe that every veteran is entitled to a comprehensive life-long medical record of illnesses and injuries they suffer, the care and inoculations they receive, and their exposure to different hazards. Further, the transfer of this record from DOD to VA should be seamless and communication between the two agencies needs to be streamlined so that data can be given to frontline health care and benefit providers.

Because that is not always the case, the problems experienced by veterans in the past, and not just Persian Gulf War veterans, has been their inability to convince VA that their disability is service connected. According to Title 38, USC, the burden of proof is placed upon the veteran. In cases such as these, Congress has a long history of creating presumptives for specific cases, such as Vietnam veterans and exposure to Agent Orange and presumption for service connection due to undiagnosed illness for Persian Gulf War veterans. This committee should be prepared to offer timely solutions in the future.

In addition, we are very pleased with Secretary Principi's recent action to get out in front of science and service-connect Persian Gulf veterans with ALS. We would hope that future Secretaries would act similarly given the situation.

Further, we are pleased that the Congressionally mandated Persian Gulf Illness Public Advisory Committee is a reality. This is a positive step, and we believe future deployment specific advisory committees will be useful. The VA should remain vigilant in its role as the chief advocate for our Nation's veterans, and once again Congress must use its powers of oversight and legislation to ensure that future generations of veterans receive the care they were promised by a grateful Nation.

As a Persian Gulf War veteran and a VFW member, I can only hope that we have helped to make the road for future veterans a little easier to travel. This concludes my statement.

[The prepared statement of Mr. Hayden appears on p. 154.]

Mr. MORAN. Gentlemen, thank you very much for your testimony. A couple of things, just observations, before we conclude today's hearing. Mr. Eddington, we will specifically ask Department of Defense about the blood samples, your suggestion that that is not taking place, and see if we can get a direct answer from them in regard to whether or not they are following the statutory requirements.

We have heard a lot today about the issue of establishing a baseline, the importance of medical records beginning to end, and it seems to me that for two accounts, a statutory requirement and, secondly, for that baseline, that blood sample is a significant issue. So we will ask the questions and be happy to relate to you and others what the results of those questions would be.

Mr. EDDINGTON. I thank the Chair for his diligence.

Mr. MORAN. You are very welcome. And Mr. Hayden, I think you raise a point that we as Members of Congress face. We often hear about policies, and this is the policy of the Department and we have new procedures in place and the real question has to become are those policies ever really effective, what is really happening in the field? And you point out a certain culture or mindset of the De-

partment of Defense and the military. I think we need to follow up to find out what the reality is as compared to what the Department is saying is their policy.

Mr. HAYDEN. Thank you.

Mr. MORAN. So I appreciate that reminder. If you three and other veterans organizations have suggestions for this committee in this regard, we would welcome those and look forward to working with you as we try to not only solve the difficulties that many servicemen and women face from the past but reduce the number of those servicemen and women that will face difficult health conditions in the future.

So I thank you for the reminder and for your service to our country.

Our committee I think is about to adjourn. The record will remain open for 5 additional days for additional statements that may be necessary to complete this record. Again, I think this topic is an important and timely one, and it is one that falls to us to not walk away from and to continue to provide oversight, and we have had some suggestions today about legislative efforts as well.

So again I appreciate the participation of our panelists today, the participation of our committee members, and the committee stands adjourned at this time. Thank you.

[Whereupon, at 12:45 p.m., the subcommittee was adjourned.]



## A P P E N D I X

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### PREPARED STATEMENT OF CHAIRMAN MORAN

#### **“Protecting the Health of Our Troops in Afghanistan”**

We are here this morning to examine the preventive procedures in place in the Departments of Defense and Veterans' Affairs to protect the health care of servicemen and women who have been and will be deployed to Afghanistan. The question we are here to answer is whether or not the lessons learned from the troop deployments to the Persian Gulf War have been integrated into the current deployment procedures of these Departments. We must take steps today to ensure that these veterans have a healthy life when they return home.

Following the unspeakable acts of terror last September 11, the President admonished the Nation to prepare for a long struggle, a military and moral struggle, against terrorism. On Monday, I witnessed the departure of 25 reservists of the 388th U.S. Army Reserve unit in my hometown of Hays, Kansas. I watched the sacrifice of these families, who are forced to give up their loved ones to a call to duty. America's war on terrorism has come home.

As we now look at the deployment of thousands of United States military forces in combat in Afghanistan and elsewhere, we should remember, and learn from, those who have served us in the past. American veterans, many of whom are here today, put their lives on the line to protect all of us in the active military services. I hope today's hearing will be informative for everyone, and will lead us to better solutions for the concerns that arose after the Desert Storm, Somalia, Kosovo, Bosnia and other recent military operations.

As a Subcommittee with jurisdiction over the V A health care system, and as Members of Congress with a strong interest in and support for our military, we want this hearing to serve as a public record of our concerns about those being deployed in harm's way on foreign shores.

We have distinguished witnesses here today to offer their views to the Subcommittee. We are privileged to have two former United States Senators, who conducted reviews and investigations on Gulf War Veterans. We have current and former officials from DOD and VA to review the roles they played in the Gulf War and how policy was formulated to deal with the known risks—as well as to discuss some of the problems later uncovered that were not anticipated in the immediacy of the deployment itself.

We will review and hear testimony on the current deployment, and hear how we benefited from the knowledge gained by past mistakes. We also will hear from advocates of veterans of the Gulf War, who will provide recommendations to ensure the health of our troops. We look forward to all their testimonies.

I am also closely following the work of the Kansas Persian Gulf War Veterans Health Initiative, a program monitoring over 7,500 Kansas veterans of the Persian Gulf War. They have completed a baseline study of the health of Kansas Persian Gulf veterans. They are currently planning a second study on neurological problems of these veterans.

Kansas State Representative Dan Thimesch, who serves a leading role in the work of that study, is submitting testimony on the work to date. I look forward to reviewing Representative Thimesch's testimony.

This is a very important hearing, with important implications. It will not be our last work on this subject. It falls to Congress to be vigilant.

The active duty and reserve forces called to serve in the war on terrorism, whether in Central Asia or elsewhere, will be veterans in the future. We want to help ensure that troop health is maintained and that veterans return with the greatest possibility of leading a healthy life.

STATE OF KANSAS



TOPEKA

HOUSE OF  
REPRESENTATIVES

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COMMITTEE ASSIGNMENTS  
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TAX, JUDICIAL & TRANSPORTATION BUDGET  
SUBCOMMITTEE  
CAPITOL RESTORATION  
SOUTHCENTRAL/SEDGWICK COUNTY DELEGATION  
GULF WAR ADVISORY BOARD

In August of 1990, over ten countries began mobilizing their military forces in response to Iraq's invasion of Kuwait. When these men and women went to serve their countries, they were willing to risk their lives facing what many believed could be a long and costly war. Long after the war ended in 1991, many Gulf War veterans are still fighting. They are fighting every day to make people understand how it is to live with a chronic illness. They are fighting to make people believe that they even have a chronic illness. I would like to thank this committee and **Congressman Moran** for providing this forum where information can be shared to educate people everywhere on the true nature of Gulf War Illness and allowing Dr. Lea Steele the opportunity to share the Kansas Gulf War veteran study results.

In 1997 the Kansas Legislature voted to establish the Kansas Persian Gulf War Health Initiative. This program is part of the Kansas Commission on Veterans Affairs. Dr. Lea Steele resided over this program and conducted a study of Kansas Gulf War veterans. This study was significant in its discovery that:

1. Kansas Gulf War veterans have significantly more health problems than veterans who served in other areas.
2. That Gulf War illness is a pattern of chronic symptoms that 34% of Kansas Gulf War veterans are suffering from.
3. The study also defined identifiable patterns that can help in understanding the nature of this illness.
4. Veterans who did not deploy to the Persian Gulf, but reported getting vaccines during the war have some of the same health problems as Gulf War veterans.

These results give us information that can be used to help solve some of the mystery surrounding Gulf War Illness.

In the GAO report released in April of 2001, it reports that "U.S. Gulf War veterans reported a rate of functional impairment twice as high and a 50% higher rate of work or functional limitations due to health problems."<sup>(1)</sup>

This means that Gulf War veterans quality of life is being affected every day. Gulf War veterans are still working, raising children and trying to live average lives. But, the chance to experience life to the best of their ability has been taken from them. Many veterans sleep all weekend just to make it through the coming work week. They write down the simplest of information because they know it will be gone from their memory shortly. Choices and concessions are made everyday by Gulf War veterans that help them just make it through the day.

Quality of health care is a major issue for Gulf War veterans. In the years following the Gulf War, the Veterans Administration has made major changes and revisions in the policies that affect the treatment of Gulf War veterans. In hospitals and out patient clinics across the country some Gulf War veterans have found efficient and helpful health care. Unfortunately, a large percentage of Gulf War veterans have found health care from the Veterans Administration to be inconsistent and uninformed. New policies should be implemented across the nation that are consistent. Veterans should expect to receive uniform healthcare from doctors who truly believe in the existence of Gulf War Illness. A belief that is based in the scientific evidence like the research summarized so eloquently in the April GAO report.

Since September 11, 2001, our country has come together and achieved amazing goals. With our country's strength and resources behind our Gulf War veterans we can make true strides in improving their health and overall quality of life. We should never forget our debt that is owed to our nations heroes. "The nation that forgets its defenders will itself be forgotten."<sup>(2)</sup>

Han K. Kang et al., "Illnesses Among United States Veterans of the Gulf War: A Population-based Survey of 30,000 Veterans," *Journal of Occupational and Environment Medicine*, 42 (5), May 2000, 491-501.

Calvin Coolidge

*Rep Daniel J. Flinn*

U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON VETERANS AFFAIRS  
SUBCOMMITTEE ON HEALTH  
HEARING  
CANNON HOUSE OFFICE BUILDING  
WASHINGTON, DC  
JANUARY 24, 2002

PREPARED STATEMENT  
OF  
HON. WARREN B. RUDMAN

CHAIRMAN MORAN, CONGRESSMAN FILNER, AND DISTINGUISHED MEMBERS OF THE VETERANS' AFFAIRS SUBCOMMITTEE ON HEALTH.

I AM WARREN RUDMAN, FORMER UNITED STATES SENATOR FROM NEW HAMPSHIRE. I SERVED AS THE CHAIRMAN OF THE SPECIAL OVERSIGHT BOARD FOR DEPARTMENT OF DEFENSE INVESTIGATIONS OF GULF WAR CHEMICAL AND BIOLOGICAL INCIDENTS FROM FEBRUARY 1998 TO DECEMBER 2000.

THANK YOU FOR ASKING ME TO COMMENT TODAY ON THE EFFORTS OF THE DEPARTMENTS OF DEFENSE AND VETERANS AFFAIRS TO IMPLEMENT LESSONS LEARNED FROM THE GULF WAR ON SAFEGUARDING THE HEALTH OF TODAY'S ACTIVE FORCE AND TOMORROW'S VETERANS.

THE GULF WAR REVEALED WITH GREAT CLARITY THE MANY SHORTCOMINGS IN THE MILITARY'S FORCE HEALTH PROTECTION POLICIES OF THAT PERIOD. THE UNDIAGNOSED SYMPTOMS THAT HAVE PROMPTED MORE THAN 12,000 GULF WAR VETERANS TO REQUEST DISABILITY COMPENSATION CONFRONTED THE TWO DEPARTMENTS WITH A PROBLEM TO WHICH THEY HAD NO READY SOLUTION. SEVERAL INQUIRIES, CULMINATING IN THE PRESIDENTIAL ADVISORY COMMITTEE ON GULF WAR VETERANS' ILLNESSES—KNOWN MORE FAMILIARLY AS THE PAC, IDENTIFIED DOCTRINAL WEAKNESSES AS WELL AS THE NEED FOR CLOSER OVERSIGHT OF DEPARTMENT INVESTIGATIONS OF POTENTIAL EXPOSURES TO CHEMICAL AND BIOLOGICAL WARFARE AGENTS.

IN RESPONSE, PRESIDENT CLINTON ISSUED EXECUTIVE ORDER 13075 IN FEBRUARY 1998, THEREBY ESTABLISHING THE SPECIAL OVERSIGHT BOARD FOR DEPARTMENT OF DEFENSE INVESTIGATIONS OF GULF WAR CHEMICAL AND BIOLOGICAL INCIDENTS. THE PRESIDENT ASKED ME TO SERVE AS BOARD CHAIRMAN AND FORMER SECRETARY OF VETERANS AFFAIRS JESSE BROWN TO SERVE AS VICE CHAIRMAN. THIS INDEPENDENT, BLUE RIBBON COMMISSION CLOSELY EXAMINED DEPARTMENT OF DEFENSE INVESTIGATIONS AS WELL AS THE COMBINED RESEARCH EFFORTS OF DOD, VETERANS AFFAIRS, AND HEALTH AND HUMAN SERVICES OVER A 25-MONTH PERIOD BEGINNING

Warren B. Rudman  
House Veterans' Affairs Subcommittee on Health  
January 24, 2002

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**IN NOVEMBER 1998. THE SEVEN-PERSON BOARD INCLUDED SIX VETERANS—FIVE OF WHOM HAD SERVED IN COMBAT. ONE BOARD MEMBER SERVED AS A NON-COMMISSIONED OFFICER DURING THE GULF WAR, AND ANOTHER MEMBER WAS THE FATHER OF A GULF WAR VETERAN. THE BOARD ALSO ENJOYED THE SKILLS OF A MEDICAL DOCTOR AND OF A PHD IMMUNO-TOXICOLOGIST.**

**THE SPECIAL OVERSIGHT BOARD PRESENTED TWO REPORTS TO THE PRESIDENT DESCRIBING THE RESULTS OF OUR OVERSIGHT ACTIVITIES AND OUR RECOMMENDATIONS FOR IMPROVING FORCE HEALTH PROTECTIONS. WHILE I KNOW THE SUBCOMMITTEE'S FOCUS IS ON LESSONS LEARNED, PLEASE ALLOW ME TO STATE BRIEFLY THE MAJOR FINDINGS AND CONCLUSIONS OF THE BOARD.**

**WE DETERMINED THAT DOD, VA, AND HHS HAD DEVELOPED AND IMPLEMENTED A COMPREHENSIVE RESEARCH PROGRAM TO INVESTIGATE THE CAUSES OF AND POTENTIAL TREATMENTS FOR THE UNDIAGNOSED SYMPTOMS THAT AFFLICT SOME GULF WAR VETERANS. I CANNOT OVEREMPHASIZE THE IMPORTANCE OF ENSURING THAT THE DEPARTMENTS FUND ONLY MERITORIOUS, PEER REVIEWED PROJECTS. EFFORTS TO FUND PROJECTS THAT HAVE NOT PASSED PEER REVIEW DO NOT SERVE THE BEST INTERESTS OF THE NATION OR ITS GULF WAR VETERANS.**

**SCIENCE ALONE SHOULD DETERMINE WHETHER A GULF WAR ILLNESS OR SYNDROME EXISTS. THE BOARD NOTED THAT NO STUDY, REGARDLESS OF FUNDING SOURCE OR THE NATIONALITY OF THE RESEARCHER, HAS VALIDATED A SPECIFIC CAUSE OF THE UNDIAGNOSED SYMPTOMS THAT AFFECT SOME VETERANS AND EVEN MEMBERS OF THE GENERAL PUBLIC.**

**WE ALSO CONFIRMED THAT DOD HAD WORKED DILIGENTLY TO DETERMINE THE EXTENT AND NATURE OF THE EXPOSURES TO NON-PERSISTENT NERVE AGENTS RELEASED INADVERTENTLY DURING THE DESTRUCTION OF KHAMISIYAH. THE BOARD AGREED WITH THE ASSESSMENT THAT WITH THE EXCEPTION OF A FEW SPECIAL FORCES PERSONNEL OPERATING COVERTLY IN IRAQ, NO AMERICAN FORCES WERE EXPOSED TO CHEMICAL WARFARE AGENT RELEASES RESULTING FROM THE BOMBING CAMPAIGN. DOD MADE GREAT EFFORTS TO PROVIDE INFORMATION TO THE PUBLIC AND TO OBTAIN FIRST-HAND REPORTS FROM GULF WAR VETERANS. I DO REGRET THAT THE COMMITMENT OF RESOURCES THAT WE OBSERVED DID NOT BEGIN SOONER.**

**THE BOARD ALSO NOTED THE IMPLEMENTATION OF NUMEROUS INITIATIVES TO IMPLEMENT LESSONS LEARNED FROM THE GULF WAR. DOD, VA, AND HHS ESTABLISHED THE MILITARY AND VETERANS HEALTH COORDINATING BOARD TO BETTER HARNESS THE THREE DEPARTMENT'S EFFORTS TO ENHANCE FORCE HEALTH PROTECTION AND ENSURE THE WELL BEING OF FUTURE VETERANS. WE REVIEWED**

Warren B. Rudman  
House Veterans' Affairs Subcommittee on Health  
January 24, 2002

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**MORE THAN A DOZEN DOD PROGRAMS TO IMPROVE MEDICAL RECORD KEEPING, COLLECT PERTINENT HEALTH DATA, ENHANCE MEDICAL INTELLIGENCE OPERATIONS, IMPLEMENT ENVIRONMENTAL SURVEILLANCE PROGRAMS, AND ADDRESS OTHER SHORTCOMINGS NOTED DURING THE GULF WAR. VA AND DOD HAVE BEGUN THE MILLENNIUM COHORT STUDY, A MULTI-DECADE HEALTH STUDY THAT WILL EVENTUALLY INVOLVE 140 THOUSAND MEN AND WOMEN, TO BETTER UNDERSTAND THE LONG-TERM EFFECTS OF MILITARY SERVICE.**

**BY LAW, THE BOARD TERMINATED OPERATIONS ONE YEAR AGO AFTER FULFILLING ITS CHARTER. I THEREFORE MUST REFER YOU TO THE DEPARTMENT OF DEFENSE...THE DEPARTMENT CAN RESPOND TO YOUR INQUIRIES AS TO WHICH OF OUR RECOMMENDATIONS WERE ACTED ON, AND DOD CAN TELL YOU THE EXTENT TO WHICH, AND HOW EFFECTIVELY THEY HAVE IMPLEMENTED THE BOARD'S RECOMMENDATIONS AND OTHER INITIATIVES. HOWEVER, THE EXCEPTIONALLY HIGH MEDICAL READINESS OF UNITS RETURNING FROM DEPLOYMENTS TO BOSNIA, KOSOVO, KUWAIT, HAITI, AND RWANDA CLEARLY INDICATES IMPROVEMENTS IN FORCE HEALTH PROTECTION HAVE BEEN MADE SINCE THE GULF WAR. MORE HARD WORK REMAINS, AND I KNOW THAT THE SUBCOMMITTEE WILL ASSIST IN THOSE EFFORTS.**

**THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY. OUR MILITARY SERVICE MEMBERS AND OUR VETERANS DESERVE THE FINEST SUPPORT THAT OUR GOVERNMENT CAN PROVIDE. I WISH YOU CONTINUED SUCCESS IN YOUR RESPONSIBILITIES TO OUR VETERANS...THEY DESERVE NO LESS FROM US.**

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Warren B. Rudman  
House Veterans' Affairs Subcommittee on Health  
January 24, 2002

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**COPIES OF THE PRESIDENTIAL SPECIAL OVERSIGHT BOARD'S  
REPORTS CAN BE FOUND AT THE FOLLOWING INTERNET ADDRESSES:**

**FINAL REPORT OF DECEMBER 20, 2000**

**[HTTP://WWW.OVERSIGHT.NCR.GOV/PSOBFINALCVR.HTM](http://www.oversight.ncr.gov/psobfinalcvr.htm)**

**INTERIM REPORT OF AUGUST 20, 1999**

**[HTTP://WWW.OVERSIGHT.NCR.GOV/PSOB\\_INTREP\\_27AUG99.PDF](http://www.oversight.ncr.gov/psob_intrep_27aug99.pdf)**

**SPECIAL REPORT OF NOVEMBER 16, 1999**

**[HTTP://WWW.OVERSIGHT.NCR.GOV/PSOB/SPECIAL\\_LTR\\_SECDEF.HTM](http://www.oversight.ncr.gov/psob/special_ltr_secdef.htm)**

**NONGOVERNMENTAL WITNESS STATEMENT**

**I HAVE RECEIVED NO FEDERAL GRANT OR CONTRACT RELEVANT  
TO THIS TESTIMONY OR TO THE SUBJECT OF VETERANS HEALTH. THE  
SPECIAL OVERSIGHT BOARD WAS AN INDEPENDENT BOARD;  
OPERATING EXPENSES WERE PROVIDED, UNDER THE EXECUTIVE  
ORDER, BY THE DEPARTMENT OF DEFENSE. MY SERVICE AS CHAIRMAN  
WAS PRO BONO.**

C: RUDMAN TESTIMONY JAN.DOC

**Testimony of The Honorable Donald W. Riegle, Jr. (U.S. Senate, Ret.)  
Chairman of Government Relations, APCO Worldwide, Washington, DC  
Before the Subcommittee on Health of the Committee on Veterans Affairs  
U.S. House of Representatives, January 24, 2002**

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Chairman Moran, ranking member Filner, and members of the subcommittee, thank you for permitting me to testify here today. Even more, let me commend and thank you for your leadership, concern and perseverance in investigating the serious health problems today facing tens of thousands of Gulf War veterans and their families.

To this day, our agencies of government have largely stonewalled this problem. This has left vast numbers of sick Gulf War veterans without needed health care – or the minimum disability support needed to sustain themselves and their families.

After a decade of stubborn Defense Department denials of the reality and scale of this problem – we finally saw, just a month ago on December 11, a page one *New York Times* story entitled “U.S. Reports Disease Link to Gulf War.”

The first paragraph of that article reads: "After years of denying any link between illness and service in the Persian Gulf War, military officials said today that veterans of that conflict were nearly twice as likely as other soldiers to suffer the fatal neurological illness known as Lou Gehrig's disease."

One can ask how it is that we have lost a decade of time – while tens of thousands of sick Gulf War veterans have languished and suffered. All the while, our Defense Department has denied any linkage to the Gulf War – and has failed to invest any significant level of resources necessary to find medical answers that might make the sick vets whole again.

How does one retain faith in a military command structure that is blind and indifferent to the persistent suffering and death of its own troops? Those veterans have been crying out for help and very often have been told "...the problem is in your head – take some pills – in effect, go away, you're an embarrassment, we don't need you any more."

That's just as ugly as it's been – and to verify it you only need to ask them or talk to their widows.

Nearly ten years ago in the U.S. Senate, the Banking Committee, under my chairmanship, instituted a major investigative effort into the probable causes of Gulf War Syndrome – and the



likely exposure of our Gulf War military forces to biological and chemical weapons. I have brought copies of those investigative findings here today – and you will see that work was carefully documented at the time – and presented in the Congressional Record in 1993 and 1994.

It is vitally important that Congress move swiftly to address these problems – especially since it's a virtual certainty that many of the biological weapons developed by Saddam Hussein were made with live, disease-producing and poisonous materials sent from the United States to Iraq in the late 1980's under the authority and approval of the U.S. Department of Commerce. These include Anthrax, E-coli, Botulism, and West Nile Virus, among others.

What we discovered then has fresh significance today – both the legions of sick Gulf War veterans urgently needing medical help and support – and the present danger of biological weapons exposure now to our citizens here at home.

Citizens in our nation's Capitol have now been killed by weapons grade Anthrax. The Congress itself has been targeted. It is critically important we now draw upon all the knowledge we have – so we can better protect our people both here at home – and also those in uniform in settings abroad.

While I have brought those original reports here today for your review, I have copied certain key pages for your direct reference and knowledge during this hearing – and those specific pages are attached to my statement.

You will see that they summarize the conclusions of that earlier investigative work and document by date and type the shipments of dangerous biological materials from the United States to Iraq in years past. You may wish to discuss some of these items today.

I come today to make four immediate recommendations for your consideration.

There is much we can and should do regarding the large number of Gulf War veterans who are experiencing severe health problems. Many are desperately ill and living in poverty. Many others have died – whose lives might have been extended. There is great human urgency to this problem.

First, I believe we should initiate a full, independent medical review of each Gulf War veteran who is listed on the voluntary medical registry.

Whatever help they need – they should get without further delay – and the federal government should pay every penny of the cost.

Beyond the individual examinations, we must catalog these patterns of illness. We should do a careful reconstruction of where each person was stationed during the Gulf War and do a systematic construction of patterns of illness tied to events, dates, places and likely exposures.

Many of the veterans with whom I have spoken recall their experiences vividly – they are the best source of information about exposures. Let's talk to them – one by one – actually listen to them – and make a systematic determination of why they are sick – and see if this information can guide us on how these Gulf War veterans can best be treated medically.

I say again, the federal government should welcome this responsibility and willingly pay all these costs. These men and women were asked to step forward and defend our country. They did. And now they must have from us the full measure of help they need to try to save and repair their lives.

Second, we need to determine exactly what biological and chemical weapons Iraq still retains – and prepare a strategy that can eliminate them once and for all. The same is true for other such stockpiles that may exist in the hands of would-be terrorists in other places.

Third, we need new military doctrines and better protective measures that will not put future U.S. troop deployments in areas of biological and chemical weapons risk without proper safeguards.

These safeguards have to include far better detection methods in war zones where these kinds of weapons may exist.

For example, during the Gulf War, we had over 14,000 chemical detection warning devices dispersed throughout the combat zone. These alarms went off tens of thousands of times as the air war took place.

The Defense Department later claimed that each and every alert that was sounded was a false alarm. Given all the other documented evidence that has been assembled, that patently false assertion cannot be allowed to stand. If it does, it will continue to prevent the move to a new regime of proper safeguards that can actually offer the protections our combat forces need today – and in the future.

If the best we can do when Lou Gehrig's disease affects a Gulf War veteran ten years later – is to finally say, "Well, sorry, we know it's a bit late, but here is your service-connected

disability check" – then we really ought to hang our heads in shame.

Fourth, we also need full public disclosure of military contamination events if and when they occur – and a response with the full medical resources of our country to meet the needs of any veteran who returns from a war zone, sick from exposures while on duty.

That means a full disclosure Defense Department when it comes to sick U.S. veterans. That requires a President, as Commander in Chief, and a Defense Secretary who will hold the officers at every rank to a standard of absolute truthfulness and transparency on these life and death matters. I believe President Bush and Secretary Rumsfeld are men who would want such a standard.

In the United States today, our professional volunteer military force is trained to accept command orders – and be ready to die in combat if necessary. In return we have a corresponding obligation on the part of our government to use every available means to protect these fighting forces during combat – and to enable them to cope with the after-effects of combat.

Chemical and biological weapons risks can produce in veterans a form of living death – of lives broken forever by unseen wounds suffered in wartime. As we are now finding here on the home front with biological Anthrax attacks, we must have new and better methods of protection. We must honor and protect these men and women within our armed services as they serve our country by equipping them with everything they need to stay alive and well. They are not so equipped today.

When we fail that test, we dishonor them and dishonor our nation. We can and must do better. Hopefully, this committee's work will lead us in that direction.

Thank you, Mr. Chairman.

**U.S. CHEMICAL AND BIOLOGICAL WARFARE-RELATED  
DUAL USE EXPORTS TO IRAQ AND THEIR POSSIBLE  
IMPACT ON THE HEALTH CONSEQUENCES OF THE  
PERSIAN GULF WAR**

A REPORT  
OF  
CHAIRMAN DONALD W. RIEGLE, JR.  
and  
RANKING MEMBER ALFONSE M. D'AMATO  
OF THE  
COMMITTEE ON BANKING, HOUSING  
AND URBAN AFFAIRS  
WITH RESPECT TO  
EXPORT ADMINISTRATION  
UNITED STATES SENATE



May 25, 1994

Iraqi forces, who have an extensive history in the use of chemical and biological warfare.

If the Department of Defense intended to conceal these exposures during the Gulf War to avoid the physical and mental disruption their use would have had on our tactical planning and deployment, their actions would have been understandable. Hoping to avoid responsibility for the casualties of this conflict, however, is quite another matter. Our afflicted veterans are sick and suffering, and some have died. Others are now destitute, having spent tens of thousands of dollars, depleting their life savings, in an unsuccessful search for an explanation for their ailments. Our enemies surely know the extent of our vulnerabilities. They would not hesitate to exploit them, nor would they hesitate to reveal them to others. The veterans of the Gulf War have asked us for nothing more than the assistance they have earned. Our refusal to come to their immediate assistance can only lead others to question the integrity of the nation they serve.

The following is a summary of the findings and recommendations of this report:

**FINDINGS:**

1. **Iraq had a highly-developed chemical warfare program with:**
  - numerous large production facilities;
  - binary (precursor chemical/solvent) capabilities;
  - stockpiled agents and weapons;
  - multiple and varied delivery systems; and,
  - a documented history of chemical warfare agent use.
  
2. **Iraq had an offensive biological weapons program with:**
  - multiple research/production facilities;
  - evidence of weaponization experimentation; and,
  - a history of reported but unconfirmed use.

3. The United States provided the Government of Iraq with "dual use" licensed materials which assisted in the development of Iraqi chemical, biological, and missile-system programs, including:
  - chemical warfare agent precursors;
  - chemical warfare agent production facility plans and technical drawings (provided as pesticide production facility plans);
  - chemical warhead filling equipment;
  - biological warfare related materials;
  - missile fabrication equipment; and,
  - missile-system guidance equipment.
  
4. The United States military planned for the use of chemical and biological weapons by Iraq by:
  - discussing the chemical/biological threat in pre-war threat assessments;
  - designating chemical/biological production facilities priority bombing targets;
  - assigning a very high priority to SCUD missile units; and,
  - conferring with the U.S. national laboratories about the hazards associated with the bombings of the chemical, biological, nuclear weapons facilities.
  
5. The United States military made preparations for the expected use of chemical/biological weapons by Iraq, including:
  - acquiring German-made FOX NBC detection surveillance vehicles shortly before the war;
  - deploying as part of standard operating procedure, automatic chemical agent alarms, chemical agent detection equipment, chemical decontamination equipment, and chemical agent protection suits, gloves, boots, and masks;
  - administering anthrax vaccines, an experimental botulinum toxin vaccine, and pyridostigmine bromide as a nerve agent pretreatment pill; and,

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<sup>1</sup>See "United States Export Policy Toward Iraq Prior to Iraq's Invasion of Kuwait." Senate Report 102-996, Senate Committee on Banking Housing and Urban Affairs, 102d Congress, Second Session (October 27, 1992).

- preparing and using personnel medical questionnaires asking soldiers departing the theater about their health and whether or not they believed they were exposed to chemical or germ warfare.

U.S. General Accounting Office reports issued after the war noted deficiencies in U.S. military medical preparations for chemical/biological warfare, including potential shortages of vaccines, NBC equipment, and NBC capability.

6. United States and Coalition Forces did detect chemical warfare agents in conjunction with definable events, including:
  - multiple chemical alarms sounding repeatedly with the onset of the air war, and directly attributed by multiple official and unofficial sources to the fallout from the bombings of Iraqi chemical facilities;
  - multiple chemical agent alarm soundings and chemical detections after both missile attacks or otherwise unexplained explosions;
  - Czechoslovak, French, and British unit detections and reporting of chemical/biological agents in the air, in puddles on the ground, after SCUD attacks, and from artillery or chemical mine explosions;
  - U.S. units detected and/or reported chemical agents in the air, as a result of SCUD missile attacks, after artillery or mine explosions, and from Iraqi munitions bunkers;
  - multiple eyewitness reporting and corroboration of a number of direct attacks as well as ongoing alarms due to fallout from the Coalition bombings; and,
  - news reports during the war confirming that U.S. units made detections of chemical agents which they believed were the result of Coalition bombings.
7. U.S. and Coalition Forces were exposed to fallout from Coalition bombings of Iraqi chemical, biological, and nuclear facilities, as evidenced by:
  - pre-war concerns requiring consultations with the U.S. national laboratories regarding the fallout expected from the bombings;
  - post-war assessments of the degree of damage to these facilities and the quantities of agents which survived the Coalition attacks;

- official weather documents showing a continual movement from Iraq of weather patterns down across Coalition troop emplacements throughout the air and ground wars;
  - chemical alarms that began sounding nearly contemporaneous with the initiation of the air war, and actual chemical detections confirming the reasons for the alarm soundings; and,
  - then Secretary of Defense Aspin's December 1993 comments that the U.S. needed to develop bombs that could target chemical and biological warfare facilities without releasing large amounts of agent into the air.
8. Wartime and post-war discoveries support the conclusion that Iraq had chemical and possibly biological weapons deployed with front line units and was prepared to use them, as evidenced by:
- UNSCOM findings of large and well-financed chemical and biological warfare programs, including large stocks of missiles, artillery, aerial bombs, rockets, and mines;
  - U.S. military unit reports of finding chemical munitions in the forward area, including artillery, mines, and bulk agents;
  - captured Iraqi documents purportedly containing orders to use chemical weapons (documents currently being independently verified);
  - reported British intercepts of Iraqi communications giving orders to use chemical weapons at the onset of the ground war; and,
  - UNSCOM reports of the discovery and subsequent destruction of 28 Scuds with chemical agent warheads -- obtained from the Soviet Union.
9. Use of biological weapons during the war can only be inferred at this time because:
- no biological agent detectors are available for or fielded with any U.S. or Coalition forces;
  - no samples are known to have been collected in situ or from sick military personnel or animals for testing for the presence of biological agents; and,
  - current test results from sick veterans and contaminated equipment are not yet publicly available.



10. The symptomology of the Gulf War veterans is consistent with exposure to a chemical/biological exposure explanation, illustrated by:
- large body of common symptoms; and,
  - distribution of illness that appear related to source of exposures, whether by proximity to an explosion, fallout, reaction to pills, contact with EPWs, contact with contaminated vehicles and equipment, or prolonged exposure to sick veterans.

**RECOMMENDATIONS:**

1. All classified information regarding events before, during, and after the war relating to:
  - the nature of Iraqi chemical and biological warfare development programs,
  - the deployment of these materials, the location of Iraqi chemical/biological forces, equipment and weapons;
  - the intentional use of, inadvertent dispersal of, and destruction of Iraqi chemical and biological warfare agents; and,
  - the detection or confirmation of chemical or biological agents should be immediately reviewed for declassification and released by the Department of Defense.
2. The massive amounts of testing data already collected by the Department of Defense and the Department of Veterans Affairs relating to the complaints of Persian Gulf War veterans should be made available to medical researchers and physicians treating these veterans and their family members.
3. A thorough and detailed epidemiological study involving all Gulf War veterans should be conducted by the Department of Defense to determine the origins and causes of the illnesses and the reported transmission of the symptoms to family members.
4. Independent testing of samples is needed from:
  - ground sites in Iraq and Kuwait;
  - sick veterans and affected family members; and,
  - contaminated equipment.

5. **A post-conflict assessment of the impact of administration of cholinesterase inhibitors in a nerve agent pre-treatment program should be conducted. Particular attention should be focused on the potential synergistic or even potentiation effects administration of these drugs might produce when combined with other hazardous exposures.**
6. **Presumption of service-connection for the purposes of medical treatment and determining disability, compensation and vocational rehabilitation eligibility (until a diagnostic protocol can be established).**
7. **The Department of Veterans Affairs claims and appeals process must be streamlined.**
8. **Government financed health care (when no other medical insurance is available) for spouses and children determined to have contracted a service-connected illness from a Gulf War veteran.**
9. **Development of appropriate diagnostic and treatment protocols both on the battlefield and in identifying post-conflict casualties.**
10. **Greater efforts to develop NBC detectors, vaccines, personnel protective equipment, and decontamination equipment.**

Further, reports of Gulf War illnesses being reported are no longer limited to military veterans of the Gulf War. Others reporting manifestation of these symptoms include:

- Department of Defense civilians who served in the Persian Gulf War.
- Department of Defense civilians working at the Anniston (AL) Army Depot and the Sharpsite (CA) Army Depot decontaminating equipment which was returned from the Persian Gulf.
- Spouses, particularly the spouses of male veterans, are reporting the following symptoms: chronic or recurring vaginal yeast infections, menstrual irregularities (excessive bleeding and severe cramping), rashes, fatigue, joint and muscle pain, and memory loss.
- Children born to veterans prior to the Gulf War. In many cases both male and female children born prior to the war have experienced symptoms similar to those of the veterans and their spouses.
- Children born following the Gulf War. Some reports have been published which suggest a high rate of miscarriages in the families of Gulf War veterans. Further, several reports have surfaced which suggest that there has been a high rate of physical abnormalities in children born to Gulf War veterans since the war.

#### **U.S. Exports of Biological Materials to Iraq**

The Senate Committee on Banking, Housing, and Urban Affairs has oversight responsibility for the Export Administration Act. Pursuant to the Act, Committee staff contacted the U.S. Department of Commerce and requested information on the export of biological materials during the years prior to the Gulf War. After receiving this information, we contacted a principal supplier of these materials to determine what, if any, materials were exported to Iraq which might have contributed to an offensive or defensive biological warfare program. Records available from the supplier for the period from 1985 until the present show that during this time, pathogenic (meaning "disease producing"), toxigenic (meaning "poisonous"), and other biological research materials were exported to Iraq pursuant to application and licensing by the U.S. Department of Commerce. Records prior to 1985 were not available, according to the supplier.

These exported biological materials were not attenuated or weakened and were capable of reproduction. According to the Department of Defense's own Report to Congress on the Conduct of the Persian Gulf War, released in April 1992:

"By the time of the invasion of Kuwait, Iraq had developed biological weapons. It's advanced and aggressive biological warfare program was the most advanced in the Arab world... The program probably began late in the 1970's and concentrated on the development of two agents, botulinum toxin and anthrax bacteria... Large scale production of these agents began in 1989 at four facilities near Baghdad. Delivery means for biological agents ranged from simple aerial bombs and artillery rockets to surface-to-surface missiles." <sup>55</sup>

Included in the approved sales are the following biological materials (which have been considered by various nations for use in war), with their associated disease symptoms:<sup>56</sup>

**Bacillus Anthracis:** anthrax is a disease-producing bacteria identified by the Department of Defense in The Conduct of the Persian Gulf War: Final Report to Congress, as being a major component in the Iraqi biological warfare program.

Anthrax is an often-fatal infectious disease due to ingestion of spores. It begins abruptly with high fever, difficulty in breathing, and chest pain. The disease eventually results in septicemia (blood poisoning), and the mortality is high. Once septicemia is advanced, antibiotic therapy may prove useless, probably because the exotoxins remain, despite the death of the bacteria.

**Clostridium Botulinum:** a bacterial source of botulinum toxin, which causes vomiting, constipation, thirst, general weakness, headache, fever, dizziness, double vision, dilation of the pupils and paralysis of the muscles involving swallowing. It is often fatal.

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<sup>55</sup>Department of Defense, Conduct of the Persian Gulf War: Final Report to Congress (April 1992)

<sup>56</sup>Terry J. Gander, ed., Jane's NBC Protection Equipment 1991-92, (Surrey, U.K.: Jane's Information Group, 1992), 3-12; Dorland's Pocket Medical Dictionary, 24th Edition (Philadelphia: W.B. Saunders Co., 1989); James A.F. Compton, Military Chemical and Biological Agents: Chemical and Toxicological Properties (Caldwell, NJ: The Telford Press, September 1987).

**Histoplasma Capsulatum:** causes a disease superficially resembling tuberculosis that may cause pneumonia, enlargement of the liver and spleen, anemia, an influenza-like illness and an acute inflammatory skin disease marked by tender red nodules, usually on the shins. Reactivated infection usually involves the lungs, the brain, spinal membranes, heart, peritoneum, and the adrenals.

**Brucella Melitensis:** a bacteria which can cause chronic fatigue, loss of appetite, profuse sweating when at rest, pain in joints and muscles, insomnia, nausea, and damage to major organs.

**Clostridium Perfringens:** a highly toxic bacteria which causes gas gangrene. The bacteria produce toxins that move along muscle bundles in the body killing cells and producing necrotic tissue that is then favorable for further growth of the bacteria itself. Eventually, these toxins and bacteria enter the bloodstream and cause a systemic illness.

In addition, several shipments of Escherichia Coli (E.Coli) and genetic materials, as well as human and bacterial DNA, were shipped directly to the Iraq Atomic Energy Commission.

The following is a detailed listing of biological materials, provided by the American Type Culture Collection, which were exported to agencies of the government of Iraq pursuant to the issuance of an export license by the U.S. Commerce Department:<sup>57</sup>

Date : February 8, 1985  
Sent to : Iraq Atomic Energy Agency  
Materials Shipped:

Ustilago nuda (Jensen) Rostrup

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<sup>57</sup>American Type Culture Collection, Rockville, Maryland (January 21, 1994).

Date : February 22, 1985  
Sent to : Ministry of Higher Education  
Materials Shipped:

Histoplasma capsulatum var. farciminosum (ATCC 32136)  
**Class III pathogen**

Date : July 11, 1985  
Sent to : Middle and Near East Regional A  
Materials Shipped:

Histoplasma capsulatum var. farciminosum (ATCC 32136)  
**Class III pathogen**

Date : May 2, 1986  
Sent to : Ministry of Higher Education  
Materials Shipped:

1. Bacillus Anthracis Cohn (ATCC 10)  
Batch # 08-20-82 (2 each)  
**Class III pathogen.**
2. Bacillus Subtilis (Ehrenberg) Cohn (ATCC 82)  
Batch # 06-20-84 (2 each)
3. Clostridium botulinum Type A (ATCC 3502)  
Batch# 07-07-81 (3 each)  
**Class III Pathogen**
4. Clostridium perfringens (Weillon and Zuber) Hauduroy, et al (ATCC 3624) Batch# 10-85SV (2 each)
5. Bacillus subtilis (ATCC 6051)  
Batch# 12-06-84 (2 each)

6. *Francisella tularensis* var. *tularensis* Olsufiev (ATCC 6223) Batch# 05-14-79 (2 each)  
**Avirulent, suitable for preparations of diagnostic antigens.**
7. *Clostridium tetani* (ATCC 9441)  
Batch# 03-84 (3 each)  
Highly toxigenic.
8. *Clostridium botulinum* Type E (ATCC 9564)  
Batch# 03-02-79 (2 each)  
**Class III pathogen**
9. *Clostridium tetani* (ATCC 10779)  
Batch# 04-24-84S (3 each)
10. *Clostridium perfringens* (ATCC 12916)  
Batch# 08-14-80 (2 each)  
**Agglutinating type 2.**
11. *Clostridium perfringens* (ATCC 13124)  
Batch# 07-84SV (3 each)  
Type A, alpha-toxigenic, produces lecithinase C.J. Appl.
12. *Bacillus Anthracis* (ATCC 14185)  
Batch# 01-14-80 (3 each)  
G.G. Wright (Fort Detrick) V770-NP1-R. Bovine anthrax,  
**Class III pathogen**
13. *Bacillus Anthracis* (ATCC 14578)  
Batch# 01-06-78 (2 each)  
**Class III pathogen.**
14. *Bacillus megaterium* (ATCC 14581)  
Batch# 04-18-85 (2 each)
15. *Bacillus megaterium* (ATCC 14945)  
Batch# 06-21-81 (2 each)

16. Clostridium botulinum Type E (ATCC 17855)  
Batch# 06-21-71  
**Class III pathogen.**
17. Bacillus megaterium (ATCC 19213)  
Batch# 3-84 (2 each)
18. Clostridium botulinum Type A (ATCC 19397)  
Batch# 08-18-81 (2 each)  
**Class III pathogen**
19. Brucella abortus Biotype 3 (ATCC 23450)  
Batch# 08-02-84 (3 each)  
**Class III pathogen**
20. Brucella abortus Biotype 9 (ATCC 23455)  
Batch# 02-05-68 (3 each)  
**Class III pathogen**
21. Brucella melitensis Biotype 1 (ATCC 23456)  
Batch# 03-08-78 (2 each)  
**Class III pathogen**
22. Brucella melitensis Biotype 3 (ATCC 23458)  
Batch# 01-29-68 (2 each)  
**Class III pathogen**
23. Clostridium botulinum Type A (ATCC 25763)  
Batch# 8-83 (2 each)  
**Class III pathogen**
24. Clostridium botulinum Type F (ATCC 35415)  
Batch# 02-02-84 (2 each)  
**Class III pathogen**



Date : August 31, 1987  
Sent to : State Company for Drug Industries  
Materials Shipped:

1. *Saccharomyces cerevesiae* (ATCC 2601)  
Batch# 08-28-08 (1 each)
2. *Salmonella choleraesuis* subsp. *choleraesuis* Serotype typhi  
(ATCC 6539) Batch# 06-86S (1 each)
3. *Bacillus subtilus* (ATCC 6633)  
Batch# 10-85 (2 each)
4. *Klebsiella pneumoniae* subsp. *pneumoniae* (ATCC 10031)  
Batch# 08-13-80 (1 each)
5. *Escherichia coli* (ATCC 10536)  
Batch# 04-09-80 (1 each)
6. *Bacillus cereus* (11778)  
Batch# 05-85SV (2 each)
7. *Staphylococcus epidermidis* (ATCC 12228)  
Batch# 11-86s (1 each)
8. *Bacillus pumilus* (ATCC 14884)  
Batch# 09-08-80 (2each)

Date : July 11, 1988  
Sent to : Iraq Atomic Energy Commission  
Materials Shipped:

1. *Escherichia coli* (ATCC 11303)  
Batch# 04-87S  
Phage host

2. Cauliflower Mosaic Caulimovirus (ATCC45031)  
Batch# 06-14-85  
Plant virus
3. Plasmid in Agrobacterium Tumefaciens (ATCC37349)  
(Ti plasmid for co-cultivation with plant integration vectors in E. Coli) Batch# 05-28-85

Date : April 26, 1988  
Sent to : Iraq Atomic Energy Commission  
Materials Shipped:

1. Hulambda4x-8, clone: human hypoxanthine phosphoribosyltransferase (HPRT) Chromosome(s) X q26.1 (ATCC 57236) Phage vector; Suggested host: E.coli
2. Hulambda14-8, clone: human hypoxanthine phosphoribosyltransferase (HPRT) Chromosome(s): X q26.1 (ATCC 57240) Phage vector; Suggested host: E.coli
3. Hulambda15, clone: human hypoxanthine phosphoribosyltransferase (HPRT) Chromosome(s) X q26.1 (ATCC 57242) Phage vector; Suggested host: E.coli

Date : August 31, 1987  
Sent to : Iraq Atomic Energy Commission  
Materials Shipped:

1. Escherichia coli (ATCC 23846)  
Batch# 07-29-83 (1 each)
2. Escherichia coli (ATCC 33694)  
Batch# 05-87 (1 each)

Date : September 29, 1988

Sent to : Ministry of Trade

Materials Shipped:

1. Bacillus anthracis (ATCC 240)  
Batch#05-14-63 (3 each)  
**Class III pathogen**
2. Bacillus anthracis (ATCC 938)  
Batch#1963 (3 each)  
**Class III pathogen**
3. Clostridium perfringens (ATCC 3629)  
Batch#10-23-85 (3 each)
4. Clostridium perfringens (ATCC 8009)  
Batch#03-30-84 (3 each)
5. Bacillus anthracis (ATCC 8705)  
Batch# 06-27-62 (3 each)  
**Class III pathogen**
6. Brucella abortus (ATCC 9014)  
Batch# 05-11-66 (3 each)  
**Class III pathogen**
7. Clostridium perfringens (ATCC 10388)  
Batch# 06-01-73 (3 each)
8. Bacillus anthracis (ATCC 11966)  
Batch# 05-05-70 (3 each)  
**Class III pathogen**
9. Clostridium botulinum Type A  
Batch# 07-86 (3 each)  
**Class III pathogen**

10. *Bacillus cereus* (ATCC 33018)  
Batch# 04-83 (3 each)
11. *Bacillus cereus* (ATCC 33019)  
Batch# 03-88 (3 each)

Date : January 31, 1989  
Sent to : Iraq Atomic Energy Commission  
Materials Shipped:

1. PHPT31, clone: human hypoxanthine  
phosphoribosyltransferase (HPRT) Chromosome(s) X q26.1  
(ATCC 57057)
2. plambda500, clone: human hypoxanthine  
phosphoribosyltransferase pseudogene (HPRT)  
Chromosome(s): 5 p14-p13 (ATCC 57212)

Date : January 17, 1989  
Sent to : Iraq Atomic Energy Commission  
Materials Shipped:

1. Hulambda4x-8, clone: human hypoxanthine  
phosphoribosyltransferase (HPRT) Chromosome(s) X q26.1  
(ATCC 57237) Phage vector; Suggested host: E.coli
2. Hulambda14, clone: human hypoxanthine  
phosphoribosyltransferase (HPRT) Chromosome(s): X q26.1  
(ATCC 57240) Cloned from human lymphoblast  
Phage vector; Suggested host: E.coli
3. Hulambda15, clone: human hypoxanthine  
phosphoribosyltransferase (HPRT) Chromosome(s) X q26.1  
(ATCC 57241) Phage vector; Suggested host: E.coli

Additionally, the Centers for Disease Control has compiled a listing of biological materials shipped to Iraq prior to the Gulf War. The listing covers the period from October 1, 1984 (when the CDC began keeping records) through

October 13, 1993. The following materials with biological warfare significance were shipped to Iraq during this period:<sup>58</sup>

Date : November 28, 1989

Sent to : University of Basrah, College of Science, Department of Biology

Materials Shipped:

1. Enterococcus faecalis
2. Enterococcus faecium
3. Enterococcus avium
4. Enterococcus raffinosus
5. Enterococcus gallinarium
6. Enterococcus durans
7. Enterococcus hirae
8. Streptococcus bovis  
(etiologic)

Date : April 21, 1986

Sent to : Officers City Al-Muthanna, Quartret 710, Street 13, Close 69  
House 28/1, Baghdad, Iraq

Materials Shipped:

1. 1 vial botulinum toxoid  
(non-infectious)

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<sup>58</sup>Memorandum from Director of the Centers for Disease Control to Chairman Riegle.

Date : March 10, 1986  
Sent to : Officers City Al-Muthanna, Quartret 710, Street 13, Close 69  
House 28/1, Baghdad, Iraq

Materials Shipped:

1. 1 vial botulinum toxoid #A2  
(non-infectious)

Date : June 25, 1985  
Sent to : University of Baghdad, College of Medicine , Department of  
Microbiology

Materials Shipped:

1. 3 yeast cultures  
(etiologic)  
Candida sp.

Date : May 21, 1985  
Sent to : Basrah, Iraq

Materials Shipped:

1. Lyophilized arbovirus seed  
(etiologic)
2. West Nile Fever Virus

Date : April 26, 1985  
Sent to : Minister of Health, Ministry of Health, Baghdad, Iraq

Materials Shipped:

1. 8 vials antigen and antisera  
(r. rickettsii and r. typhi)  
to diagnose rickettsial  
infections (non-infectious)

**UNSCOM Biological Warfare Inspections**

UNSCOM inspections uncovered evidence that the government of Iraq was conducting research on pathogen enhancement on the following biological warfare-related materials:<sup>59</sup>

- bacillus anthracis
- clostridium botulinum
- clostridium perfringens
- brucella abortis
- brucella melitensis
- francisella tularensis
- clostridium tetani

In addition, the UNSCOM inspections revealed that biological warfare-related stimulant research was being conducted on the following materials:

- bacillus subtilis
- bacillus cereus
- bacillus megaterium

UNSCOM reported to Committee staff that a biological warfare inspection (BW3) was conducted at the Iraq Atomic Energy Commission in 1993. This suggests that the Iraqi government may have been experimenting with the materials cited above (E.Coli and rDNA) in an effort to create genetically altered microorganisms (novel biological warfare agents).

**Biological Warfare Defense**

The following section, describing the types, dissemination, and defensive measures against biological agents, is quoted verbatim from a United States Marine Corps Institute document, Nuclear and Chemical Operations, MCI 7711B, used in the Command and Staff College's nonresident program. It is clear from this document that the Department of Defense recognizes both the threat and U.S. vulnerability to biological weapons. This document also outlines

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<sup>59</sup>Staff interview, UNSCOM, February 22, 1994..

**Statement of  
The Honorable Frances M. Murphy, M.D., M.P.H.  
Deputy Under Secretary for Health  
Department of Veterans Affairs  
Before the  
Subcommittee on Health  
House Committee on Veterans' Affairs on  
Advances in Veteran's Health Care and Assistance  
Ten Years After the Gulf War**

**January 24, 2002**

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Mr. Chairman, I thank you for the opportunity to testify before the subcommittee today on changes in VA health care and benefits assistance for veterans based upon ten years of experience helping Gulf War veterans. I am accompanied today by Dr. Susan Mather, VA's Chief Public Health and Environmental Hazards Officer; and Dr. Craig Hyams, VA's Chief Consultant for Occupational and Environmental Health.

The recent commemoration of the 10<sup>th</sup> anniversary of the Gulf War makes this an excellent time to reflect upon VA's responses to the needs of Gulf War veterans over the last decade. This is made all the more relevant by the recent deployment of U.S. troops in the war against terrorism. From the lessons learned in serving veterans of past conflicts, I believe that today VA is in a better position than ever before to meet the needs of veterans who serve in all capacities, both at home and abroad.

During the Gulf War, approximately 697,000 men and women served in Operations Desert Shield and Desert Storm from August 1990 to June 1991. Compared to any other military force in U.S. history, the Americans who served in the Gulf War were unique. They included more women and more parents; more members of the Reserves and National Guard were activated to serve in the Gulf. There was also greater ethnic diversity within these forces. Returning Gulf war veterans rightly expected access to high quality health care and fair compensation for injuries and illnesses resulting from the circumstances of their service.

Even before the conclusion of Operation Desert Storm, VA recognized that Gulf War veterans would likely return with unique health problems, such as respiratory illnesses from exposure to the smoke from oil fires in 1991. In 1992 and 1993 reports of increasing health problems among Gulf War veterans began to emerge. VA developed programs to respond to the unique health requirements of Gulf War veterans. In 1992 Congress authorized special health care eligibility for Gulf War veterans in Public Law 103-210. Approximately 4,500 veterans are enrolled under this special authority. To date, VA has outpatient or inpatient health care to provided nearly 300,000 Gulf War veterans.



## HEALTH CARE

### **Gulf War Veterans' Health Examination Registry**

To respond to the immediate health concerns of returning Gulf War veterans, VA established a health examination registry modeled after its Agent Orange Registry program for Vietnam veterans. This *Gulf War Veterans' Health Examination Registry* incorporates data on symptoms, diagnoses, and reported hazardous exposures of Gulf War veterans who come to VA for this systematic clinical examination. To date, VA has evaluated more than 83,000 Gulf War veterans in this clinical registry program. VA's Registry is an important mechanism for bringing veterans into the VA health care system and for suggesting areas of research on Gulf War health questions. The insights provided by the Registry have also proven invaluable for developing appropriate outreach efforts. Operation of the registry at VA medical centers throughout the United States has produced a large cadre of physicians and other health care providers who are knowledgeable about Gulf War health care issues.

### **Vet Centers and Readjustment Services**

VA also improved health care for Gulf War veterans by building upon existing programs. For example, VA's Vet Centers have adapted their readjustment and counseling services to help returning Gulf War veterans and their families. Authorized by Congress in 1979, VA's Vet Centers initially provided a wide range of services to Vietnam veterans, including psychotherapy, individual and family counseling, substance abuse intervention, sexual trauma counseling, and employment and educational assistance. To date, VA's Vet Centers have provided more than 115,000 Gulf War veterans with psychological war trauma counseling and other social readjustment services.

### **Depleted Uranium (DU) Health Surveillance Program**

VA also initiated a DU Surveillance Program, originally for "friendly fire" victims who could have retained DU shrapnel in their bodies. Medically, we have nearly 50 years experience with health effects from exposure to uranium. But we have much less experience with human exposure to DU shrapnel. Published results so far indicate that the primary concern for these veterans remains the traumatic injury caused by the initial shrapnel wound rather than any subsequent health effects from DU. Nevertheless, as a matter of prudent caution, VA will continue this health surveillance program. We have also made DU exposure screening available for other Gulf War veterans. We've had about 540 requests for this 24-hour urine screen. Among those veterans given 24-hour urine tests, we've had 3 samples with elevated uranium levels, and the source of this elevation is currently under investigation.

### **Referral Centers**

For Gulf War veterans with severe symptoms that remain unexplained after taking a Registry health examination, the local VA physician may refer them to one of VA's four Gulf War Referral Centers. Created in 1992, the first centers were located at VA medical centers in Washington, D. C.; Houston, TX; and Los Angeles, CA. In June 1995, an

additional Referral Center was designated at Birmingham, AL. The referral centers have evaluated 786 Gulf War veterans.

#### **Environmental Hazards Centers**

In 1994 VA established three Environmental Hazards Centers, in Portland, OR; East Orange, NJ; and Boston, MA. These centers developed and coordinated a broad range of Gulf War veteran health research, including epidemiological and toxicological studies. In 1996, a fourth center was added in Louisville, KY, to focus specifically on reproductive issues. In 2000, VA extended the funding of the Boston Environmental Hazards Center, and funded a new Environmental Hazards Center at the San Antonio VAMC. Funding for both centers was for five years. These joint VA and university centers bring together interdisciplinary teams of academic and VA researchers with an exceptional array of clinical and research expertise.

#### **Clinical Demonstration Projects**

In 1998 VA initiated five Clinical Demonstration Projects to test new approaches for treating and improving the health of Gulf War veterans who suffer from undiagnosed and ill-defined disabilities. These two-year projects were carried out at VA medical centers at Brockton/West Roxbury, MA; Portland/Seattle, OR; Tampa, FL; Birmingham, AL; and, Cincinnati/Cleveland, OH. Effective treatments for veterans that were developed by these programs have been made available to other VA medical centers.

#### **Health Care Provider Education**

**Clinical Practice Guidelines.** In response to the clinical needs of Gulf War veterans with difficult to diagnose yet sometimes debilitating symptoms, VA and the Department of Defense (DoD) have developed new Clinical Practice Guidelines for Post-Deployment Health and for two symptom-based illnesses, Chronic Fatigue Syndrome and Fibromyalgia. These new Guidelines, which the Institute of Medicine has highly recommended, will give VA primary care providers the tools they need to diagnose and treat veterans with such illnesses.

**Quarterly conference calls.** VA's Environmental Agents Service conducts quarterly conference calls to ensure that the physicians and staff responsible for the Gulf War and Agent Orange Health Examination Registry programs are kept up to date on VA health care policies, new relevant statutes, and new scientific and medical care issues. Nearly one hundred medical facilities regularly participate in these calls, as do Gulf War and Agent Orange telephone hotline operators, who are at the front line of answering questions from veterans and their families.

**National Conferences.** Recognizing the importance of free and open discussion among scientists involved in ongoing and groundbreaking Gulf War veterans health research, VA and DoD sponsor regular research conferences on these issues. The fifth and most recent conference was held January 24 to 26, 2001, in Alexandria, VA. These

conferences generate summary reports that are available to scientists, veterans, and others with an interest in veterans health issues.

**Independent Study Guides.** Recognizing the need to educate and train health care providers about the unique medical care needs and concerns of Gulf War veterans and veterans of other deployments, VA began an ongoing training program, known as the Veterans Health Initiative (VHI), for our health care providers. A key product of the VHI is the independent study guide "A Guide to Gulf War Veterans' Health," which will ensure that all Gulf War veterans coming to VA facilities will encounter health care providers who are knowledgeable and sensitive to their health care concerns. All VA health care providers were asked to take advantage of veterans health education programs, and the Under Secretary for Health has established performance goals to monitor compliance.

**Resident Training and Pocket Cards.** Because VA is extensively involved in the nationwide training of physicians, medical residents, medical students, nurses, and associated health care professionals, we are in an excellent position to affect national health care for all veterans. More than half the physicians practicing in the United States have received part of their professional education in the VA health care system. In this regard, VA has produced pocket-card guides designed to remind our health care providers about the specific health concerns of both Gulf War veterans and veterans of other eras.

### **Outreach**

To meet its goal of informing Gulf War veterans and their families about relevant health care and compensation issues, VA uses Veterans' Service Organizations (VSO) briefings, direct mailing of a quarterly Gulf War Newsletter with a distribution of over 400,000 copies, fact sheets, posters, web sites, and a national telephone helpline. From analysis of registry data, we now understand that veterans have substantial concerns about a wide range of specific exposures and experiences during the Gulf War. In response, VA has ensured that Gulf War outreach and information products provide in-depth coverage of each of these concerns.

## **RESEARCH AND SURVEYS**

### **Research Programs**

The principal finding from VA's systematic clinical registry examinations of about 12 percent of Gulf War veterans is that veterans are suffering from a wide variety of mostly recognized illnesses that receive conventional treatments. A unique "Gulf War Syndrome" has not been identified. Subsequent research studies, some based upon initial data derived from the VA Registry, have confirmed these conclusions. These studies were summarized at the "Conference on Illnesses Among Gulf War Veterans: A Decade of Scientific Research," held January 24 to 26, 2001, in Alexandria, VA. However, despite the value of the clinical registry for improving basic health care and in generating hypotheses for further

research, clinical registries are limited because participants are self-selected and exposure assessments are self-reported. Although registry findings suggest that Gulf War veterans do not have a single type of health problem, these findings cannot be used to determine whether veterans are suffering from specific diagnoses or symptoms at higher rates than expected. To determine prevalence and incidence, population-based epidemiological studies are needed.

As the lead federal agency on Gulf War related research, VA has been responsible for coordinating federally sponsored epidemiological and other relevant scientific studies. As of today, this coordinated approach has obligated approximately \$174 million for 193 research projects on a very broad array of Gulf War health issues. Much of this work is still ongoing, and much of it is at non-governmental institutions, including independent research universities.

VA's own research activities include (1) the VA comprehensive mortality study; (2) an interagency study of hospitalization rates; (3) the VA National Gulf War Health Survey; and (4) longitudinal health studies currently under development that will evaluate the long term health consequences of hazardous deployments.

As a whole, the research program has focused upon specific questions related to the Gulf War. Nevertheless, there is an appreciation that the issues extend beyond this cohort of veterans and include a broad range of health effects associated with all military deployments. The lessons learned from this integrated Gulf War research program, therefore, will provide critical insights into anticipating, diagnosing, and treating the health needs of future returning veterans and their families.

#### **National Health Survey of Gulf War Veterans and their Families**

VA's National Health Survey of Gulf War Veterans and their Families is a major ongoing study initiated in recognition of the need to better characterize the health status of the entire Gulf War veteran population. Survey questionnaires were mailed to a random sample of 15,000 Gulf War veterans and an equal number of non-deployed controls. The study compared incidence rates of symptoms and illnesses and evaluated self-reported wartime exposures.

Results from the initial two phases of this study show that Gulf War veterans are reporting significantly higher rates of diverse symptoms, including joint, muscle, respiratory, gastrointestinal, and skin problems. This population also reports higher rates of chronic fatigue and symptoms of post-traumatic stress disorder (PTSD).

VA recently completed the final phase of this study, which includes a physical examination with laboratory diagnostic testing of veterans and their families. A report will be completed shortly. In this phase, 2,000 veterans and approximately 3,000 spouses and children have been thoroughly evaluated. The clinical investigation focused upon neurological and cognitive dysfunction, chronic fatigue syndrome, fibromyalgia, PTSD, arthritis, hypertension, asthma, bronchitis, and birth defects among children. This study has

produced critical, objective data about the health status of a fully representative sample of Gulf War veterans and their families.

#### **Clinical Treatment Trials**

In 1998, VA and DoD initiated two clinical treatment trials called the "ABT" (antibiotic treatment) and "EBT" (exercise-behavioral therapy) trials. Gulf War veteran patients were eligible if they had at least two of three debilitating symptoms (fatigue, musculoskeletal pain, and cognitive dysfunction) that began after August 1990 and lasted for more than six months up to the present.

The ABT trial included 491 Gulf War veterans and was designed to test if antibiotic treatment with doxycycline over 12 months would improve functional status of patients with chronic symptoms. Preliminary results showed that doxycycline was not an effective treatment. The EBT trial, which included 1,092 Gulf War veterans, was designed to test if aerobic exercise and cognitive behavioral therapy (CBT) would improve physical function in veterans. Preliminary results showed that exercise, CBT, or both did lead to significant improvements in mental health function. Moreover, exercise, with or without CBT, led to significant improvements in symptoms of fatigue and memory problems. Aerobic exercise appears to be a promising treatment for Gulf War veterans who have chronic debilitating symptoms.

#### **Amyotrophic Lateral Sclerosis (ALS)**

Gulf War veterans have voiced concerns about a possible association between ALS, also called Lou Gehrig's disease, and service in the war. Preliminary data suggested that the age distribution of cases of ALS in Gulf War veterans deployed during Operations Desert Shield/Desert Storm appeared to be younger than the age distribution of cases of ALS in the general U.S. population. In March 2000, VA began a research effort to identify all cases of ALS occurring among Gulf War veterans deployed to the Gulf during Operations Desert Shield/Desert Storm and non-deployed veterans. VA collaborated with DoD, the Centers for Disease Control and Prevention, university experts, and the ALS Association to determine the veterans' health status and to describe their exposures to potential risk factors for ALS.

The preliminary results show that Gulf War veterans deployed during Operations Desert Shield/Desert Storm had almost a two-fold increased rate of ALS, compared to non-deployed veterans. Accordingly, the Secretary of Veterans Affairs decided to take steps to compensate veterans with ALS who were deployed to the Gulf region during Operations Desert Shield/Desert Storm. VA has contacted the Gulf War veterans identified in the study to help them file new claims or to expedite existing claims. The next step in the investigation will involve careful evaluation of possible risk factors in the veterans, including family history, military occupation, injuries and trauma, and exposures to hazardous chemicals.

### SERVICE-CONNECTED COMPENSATION

In 1994, in precedent-setting legislation (Public Law 103-446), Congress gave VA authority to provide service-connected compensation to certain Gulf War veterans for disabilities resulting from undiagnosed illnesses. Over 3,200 Gulf War veterans have received compensation based upon this law. More recently, in Public Law 107-103, Congress expanded this authority by further authorizing compensation for certain Gulf War veterans who are suffering from medically unexplained, chronic multisymptom illnesses that are defined by clusters of signs or symptoms. Examples of such illnesses include chronic fatigue syndrome, fibromyalgia, and irritable bowel syndrome.

To help us in establishing a sound scientific basis for compensation policy, VA contracted with the National Academy of Sciences Institute of Medicine (IOM) to provide an independent analysis of the published peer-reviewed literature on the relevant exposures and evidence of association with health effects in Gulf War veterans. In their first report, released in September 2000, the IOM reviewed the health effects of four exposures: vaccines, depleted uranium, sarin and cyclosarin chemical warfare nerve agents, and pyridostigmine bromide chemical warfare agent pre-treatment.

On the basis of the IOM committee findings, the Secretary of Veterans Affairs determined that current scientific evidence does not support an association between these exposures and any specific disease among Gulf War veterans, and that no presumption of service connection is warranted. The IOM has already begun its next two-year review, focusing on health effects from pesticides and solvents used during the Gulf War. That report is expected to be completed in August 2002.

### NEXT STEPS -- LESSONS FOR THE FUTURE

#### **Veteran Health Surveillance and Outreach**

**Recruit Assessment Program (RAP).** Based on the Department's experience with Gulf War veterans health care and benefits programs, we recognize the critical importance of good health documentation and life-long medical records that cover periods before, during, and after deployment. Many Gulf War service member and veteran health issues were not verifiable due to lack of detailed computerized records documenting pre-enlistment and pre-deployment health status. Our understanding of Gulf War veterans' illnesses is hampered by inadequate base-line health information, and inadequate documentation of health during active duty.

DoD and VA have recognized this shortcoming and are attempting, through development and implementation of the Recruit Assessment Program, to collect routine baseline health data from U.S. military recruits involved in current and future combat or peacekeeping missions. The program will establish baseline health information for use in

appropriate health databases and future veterans' health, compensation, and research programs. Taken together, these efforts will help us to evaluate health problems among service-members and veterans after they leave military service and to address post-deployment health questions. This program will require the continued support of the DoD senior leadership both in concept and in application of resources. The Armed Forces Epidemiology Board and the National Academy's Institute of Medicine have also endorsed the program concept. Pilot program development and testing are under way at the Marine Corps, Navy, and Air Force recruitment and training commands.

**Health Care and Surveillance following Future Combat Missions.** VA and Congress have also shown an appreciation for the importance in the future of providing health care and health surveillance for veterans as soon as possible following combat missions. Section 102 of Public Law 105-368, enacted in 1998, authorizes VA to provide health care to service members who served on active duty in combat in a war after the Gulf War or during a period of hostilities after November 11, 1998, for a two-year period following their release from active service for any illness, even if there is insufficient medical evidence to conclude that such condition is attributable to such service.

This two-year period will allow for the collection of basic health information and aid in the evaluation of specific health questions, such as difficult to explain illnesses. Based upon lessons learned from the Gulf War, I believe that the continuation of this treatment authority is critical for VA's ability to provide comprehensive health care to veterans who serve in future combat missions.

**Improved Clinical Care for War-Related Illnesses.** Most medical care for veterans very properly focuses on well-defined conditions for which there are established treatment protocols. But our experience following the Gulf and Vietnam wars has shown us that this approach does not address the health care needs of all combat veterans. Today, we appreciate that combat casualties do not always result in visible wounds, and that historically, after all conflicts, many veterans will return with difficult to diagnose yet nevertheless debilitating health problems. This requires that we develop new ways of responding to the health needs of these veterans.

We have seen that Gulf War veterans as a whole report a variety of chronic and ill-defined symptoms including fatigue, neurocognitive problems, and musculoskeletal problems, at rates that are significantly greater than for their non-deployed peers. Such poorly understood illnesses have been reported after every major conflict since at least the U.S. Civil War, and are now being reported after recent peacekeeping missions to the Balkans. The problem of chronic and ill-defined illnesses in veterans has become a significant concern for VA, for veterans and their families, and for all Americans. Research currently indicates that for many returning veterans, the unifying health risk factor appears to be the deployment itself rather than any identifiable exposure. The insights to be gained from such research have clear implications for future VA health care, research, and

VA has responded to this issue, in part, by establishing two new national Centers for the study of war-related illnesses and post-deployment health issues. On May 9, 2001, the Secretary of Veterans Affairs approved the selection and funding of these two centers. Called Centers for the Study of War-Related Illnesses, they are located at the VA medical centers in Washington, D.C., and East Orange, NJ. A competitive, scientific, peer-review process was used to select the two sites. The centers will focus on four core areas of medical care, research, risk communication, and education for health care personnel.

We well understand that we must expect casualties with difficult to diagnose but disabling conditions from more recent deployments, such as in Bosnia and the war on terrorism. Finding effective prevention and treatment will be the primary purpose of these two new centers. Therefore, these centers will also broaden the clinical role of VA's four Gulf War Referral Centers.

The new Centers for the Study of War-Related Illnesses also have strong academic affiliations with medical schools and other health professional schools. Additionally, they are collaborating with the Department of Health and Human Services and DoD, including DoD's Centers for Deployment Health, to ensure lessons learned are applied to the active-duty military as well as to veterans.

**Veterans Health Initiative.** Dr Garthwaite and I have built on the lessons learned from our experience with Gulf War and Vietnam veterans programs and implemented an innovative approach to health care for veterans. The Veterans Health Initiative, is a comprehensive program to enable practitioners to recognize the connection between certain health effects and military service, to allow veterans to better document their military history, to prepare health care providers to better serve their veteran patients, and to establish a database for further study. The Education component is a voluntary program that provides continuing medical education and cash bonuses to those who successfully complete the program. Modules are being developed on Spinal Cord Injury, Cold Injuries, Traumatic Amputation, PTSD, Sensory Loss (blindness/visual impairment and hearing loss), Radiation, Agent Orange, and Gulf War. The Spinal Cord Injury, Cold Injury, Amputation, Agent Orange, and Gulf War modules have already been completed. These important tools will enable practitioners to better understand and recognize the relationship between certain health effects and military service. We look forward to expanding and enhancing this program in the near future.

**Enhanced Outreach.** The Gulf War made clear the value of providing timely and reliable information to veterans and their families about the health risks they faced during deployment. In this regard, VA has developed a new brochure that addresses the main health concerns for military service in Afghanistan and South Asia. It answers health-related questions that veterans, their families, and their health care providers will have about the military deployment to fight terrorism. It also describes relevant medical care programs that VA has developed in anticipation of the health needs of veterans returning from combat



and peacekeeping missions abroad. The brochure will be distributed to all VA medical centers.

**Interagency and International Collaboration.**

**Enhanced Interagency Collaboration and the Military & Veterans Health Coordinating Board (MVHCB).** Work on Gulf War health issues has significantly increased intergovernmental coordination between VA, DoD, and the Department of Health and Human Services. Many in and out of government concluded that the government's response to veterans' concerns about illnesses they believed were related to their service in the Gulf War was not well coordinated among the affected Departments and agencies of the Executive Branch. The initiation in 2000 of the tri-agency *Military and Veterans Health Coordinating Board* has served to institutionalize future interagency cooperation. The Coordinating Board expanded the important interagency collaborative activities of the earlier Persian Gulf Veterans Health Coordinating Board to cover interagency coordination for all veteran and military deployment health issues. This formalization of governmental coordination will play a critical role in addressing health problems among veterans in future conflicts and peacekeeping missions.

**International Collaboration.** Increased collaboration has also extended beyond America's borders and strengthened coordination with Military and Veteran Affairs Departments and Ministries from other countries. On post-war health issues, such as those arising after the Gulf War, VA scientists and policy makers collaborate and share lessons learned with their counterparts in Canada, the United Kingdom, and Australia. Based upon the similarity of health problems among war veterans of different countries, these collaborations have begun to focus on the health questions that consistently arise among military personnel returning from all hazardous deployments.

The collective experience of caring for Gulf War veterans from the United States, Canada, the United Kingdom, and Australia also has led to a greater appreciation of the need to assist veterans with unexplained symptoms. U.S. Gulf War veterans are entitled to equitable compensation for illnesses and injuries experienced during military service or resulting from service. However, the paucity of scientific knowledge regarding the relationship between military environmental exposures and human health consequences has hindered VA's ability to establish the required nexus between Gulf War service and veterans' health problems. This difficulty was further exacerbated by the reality that some veterans have disabling multi-symptom illnesses for which no established medical diagnosis can be found.

**Conclusion**

In summary, a veteran separating from military service and seeking health care today will have the benefit of VA's decade-long experience with Gulf War health issues. VA has successfully adapted many existing programs, resulting in a clinical health registry,

improved outreach and education, and readjustment counseling services for Gulf War veterans. VA has also relied on prior experience with Vietnam veterans and Agent Orange to develop a fair and defensible policy on compensation. In collaboration with other federal agencies, VA has also initiated new programs for developing and coordinating federal research on veterans' health questions.

Mr. Chairman, this concludes my statement. My colleagues and I will be happy to respond to any questions that you or other members of the subcommittee might have.

**House Committee on Veterans Affairs  
Subcommittee on Health**

**Statement**

by

**Ms. Ellen Embrey**

**Deputy Assistant Secretary of Defense  
for Force Health Protection and Readiness**

**Department of Defense**

Mr. Chairman, I appreciate the opportunity to appear before the Subcommittee on Health to report on the Department of Defense's continuing efforts related to the illnesses and undiagnosed physical symptoms of veterans of the Gulf War and to provide information on the status of some deployment health surveillance programs.

First, let me emphasize that the Department of Defense is committed to providing a world-class health care system for its servicemembers and their families. This commitment is especially strong today when our soldiers, sailors, airmen, Marines and Coast Guardsmen are deployed throughout the world in support of Operation Enduring Freedom and other contingencies. As America's sons and daughters serve and protect our nation, I recognize they may encounter unique challenges from operational or environmental conditions as well as from combat. The Gulf War and subsequent deployments to Somalia, Bosnia, and Kosovo provided the Department of Defense insights into the importance of deployment health protection. In response, we have changed processes, revised procedures, and invested heavily in research to develop more effective force health protection measures and equipment for our people; but our work continues. We are assessing and monitoring current deployments and are committed to provide for all who have health concerns related to deployments.

The experiences of the Gulf War focused our attention on traditional and non-traditional challenges to deployment health. Recognizing the seriousness of these challenges, the Department of Defense sought the assistance of the Institute of Medicine. In a comprehensive three-year study, titled "Strategies to Protect the Health of Deployed U.S. Forces," the Institute of Medicine validated the challenges facing us and recommended strategies to better protect the health of the forces in the future. We have addressed many of these challenges and continue now to build the broad and integrated systems that will enhance prevention of, accelerate surveillance for, and increase effectiveness of treatment for deployment-related illnesses and injuries.

In 2000, the Joint Staff created and established a vision for Force Health Protection to support Joint Vision 2020. This vision encompasses a set of health programs that provide an integrated and focused approach to protect and sustain the Department's most important resources—its servicemembers and their families. Force Health Protection is built on these pillars—promoting and sustaining a fit and healthy force, casualty prevention and casualty care and management. Based on lessons of the Gulf War and subsequent deployments, this vision takes a life-cycle, long-term approach to protecting the health of those who serve. However, this vision places its most intense focus on continuous improvement to the Military Health System's doctrine, organizations, people, equipment, and technology to support the readiness and effectiveness of the fighting forces when they deploy. It requires the monitoring and surveillance of threats and the forces in military operations, enhancing commanders' and servicemembers' awareness of threats before they affect the health of the force, and providing essential care of injured and ill in a theater as well as evacuation for definitive medical care. These key areas are being rapidly implemented in Afghanistan and in other deployments today. Health Affairs, the Joint Staff, combatant commanders, and the military services are indivisible partners within the Department of Defense in this effort.

The events of the Gulf War also caused the Department to take a hard look at occupational and environmental health surveillance issues with a focus on casualty prevention. To that goal, we have designated the U.S. Army Center for Health Promotion and Preventive Medicine as the Department's lead agency to provide a comprehensive environmental surveillance program that:

- Identifies risks for diseases and injuries for deployed forces;
- Identifies significant environmental and occupational hazards;
- Determines the impact of disease or non-battle injury (DNBI) on readiness;
- Provides support for commanders, policy makers, and others who can act to prevent diseases and injury; and
- Monitors the effectiveness of prevention strategies and programs.

Another area where we focused attention was medical logistics. Before the Gulf War, the depot system was the primary means of obtaining medical supplies. Since then, the Department has observed tremendous improvement through the implementation of the tri-service Defense Medical Logistics Standard Support system, which standardizes numerous medical logistics systems used by the Services' medical departments. This system improves support to deployed forces and maximizes cost savings by taking advantage of business practices of the commercial community. As a result, today, the Department is better prepared to meet the medical materiel requirements of deployed forces.

Issues and concerns from the Gulf War remain and we intend to continue our vigorous efforts to address and resolve these issues. We are equally committed to

broaden those efforts to include issues and concerns arising from current and future deployments. Dr. Winkenwerder takes seriously his role as the Special Assistant for Gulf War Illnesses, Medical Readiness, and Military Deployments and has begun to focus on deployment health issues as they affect the entire Military Health System.

Dr. Winkenwerder, as the Assistant Secretary of Defense for Health Affairs, has aligned the former staff of the Office of the Special Assistant into a Deployment Health Support Directorate, which will continue to provide support and outreach to all those with issues associated with any deployment. Through my office, that directorate, in cooperation with the Joint Staff and the military services, will provide critical assessments of deployment health-related processes and issues. As a result, we can more closely monitor force deployment health protection issues. Improving the adequacy of environmental surveillance, completeness of individual medical records, and implementation of other lessons learned will allow the Military Health System to be responsive to the health concerns of our servicemembers, veterans, and their families.

One area in which we continue to advocate the health concerns of servicemembers and veterans is through our support of medical research. As you may know, Health Affairs and the Deputy Under Secretary of Defense for Science and Technology participate on behalf of the Department on the interagency Research Working Group of the Military Veterans' Health Coordinating Board. The Research Working Group facilitates coordination and collaboration of research among the Departments of Defense, Veterans Affairs, and Health and Human Services. I believe the veterans are best served by following accepted scientific processes for selection and funding of medical research. We are committed to investigating the possible causes of illnesses and treatments for medically unexplained physical symptoms that are affecting veterans.

We have begun research on the health of military personnel over their entire careers and beyond. A prospective study of U.S. military forces, called the Millennium Cohort Study, responds to the need for a longitudinal study to assess the health impact of major elements of military service, especially deployments and their associated risks. This study also responds to recommendations from Congress and the Institute of Medicine to systematically collect population-based demographic and health data to evaluate the health of servicemembers throughout their military careers and after leaving military service. This study will eventually use a cross-sectional sample of over 140,000 military personnel who will be followed prospectively every three years over a 21-year period through 2022.

Additionally, in response to veteran concerns and congressional direction, we have established three centers focused on deployment health issues. These centers provide research, medical surveillance, and clinical care services. For example, the Center for Deployment Health Research in San Diego has established a DoD birth defects registry and monitors reproductive outcomes among all military families, including those

of personnel who have deployed. All three centers work closely with their VA counterparts—two centers for the study of war-related illnesses.

The Department also has taken steps to ensure that we deploy fit and healthy military personnel, that we monitor their health while they are deployed, and that we assess their health when they return. The Center for Deployment Health Surveillance at Walter Reed Army Medical Center in Washington D.C. is our key to tracking and analyzing these deployment health data. Our policy and practice is to assess potential health threats in areas of deployment and minimize such threats where feasible. All of these principles are incorporated in DoD policy letters and directives and into a policy memorandum of the Joint Staff. The combatant commanders and their component commands, through the extensive professional efforts of the military services' medical departments, execute these policies and directives in the field.

Because we are concerned about the health of veterans, both during their military service and after they have left active duty, we work closely with the Department of Veterans Affairs initiating procedures and programs to facilitate the smooth transition of servicemembers' records to the VA.

As documented for Gulf War veterans, the majority of ailments found in deployment participants have been medical conditions seen commonly in other military, veteran, and civilian outpatient populations. The Deployment Health Clinical Center at Walter Reed Army Medical Center, in cooperation with the Department of Veterans Affairs, has developed and tested a patient-oriented, evidence-based clinical practice guideline to aid primary caregivers in the assessment of illnesses that occur after deployments. Implementation of this guideline will begin next month. My expectation is that all beneficiaries who have been involved with deployments – including families of deployed servicemembers – will receive health care that is fully responsive to any special health issues that arise after deployments. I believe this clinical practice guideline will foster an important partnership between the individual with the health concern and the caregiver who directs individualized treatment for better continuity of care.

In addition, the Department continues to work towards fielding medical information systems to provide complete patient health records electronically, including all immunizations. Such systems will greatly facilitate the preservation of individual health records, epidemiological studies of military health, and transfer of health records to the Department of Veterans Affairs.

We will continue our close collaboration with the VA to improve medical service to our veterans. In addition to the clinical practice guideline, we have instituted common separation medical examinations, which efficiently serve the needs of veterans, the DoD, and the VA. Another result of the DoD-VA partnership is "FEDS HEAL." This program establishes a network that links the provider resources of the VA and the Department of Health and Human Services Division of Federal Occupational Health to furnish physical

examination, immunization, dental screening, designated dental treatment, and other specified diagnostic services to units and individuals in the National Guard and Reserve components. I fully expect additional successes from our continuing collaboration with the VA.

In conclusion, based on observations during our visits to operational units of the Department of Defense, we believe the military health services are totally committed to ensuring the health of our military forces, and we are committed to doing everything in our power to provide a world-class health care system for our servicemembers, veterans, and their families.

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UNCLASSIFIED

RECORD VERSION

OUTLINE OF  
HEARING STATEMENT BY

LIEUTENANT GENERAL RETIRED RONALD R. BLANCK  
THE SURGEON GENERAL  
UNITED STATES ARMY

BEFORE THE

COMMITTEE ON VETERANS AFFAIRS  
SUBCOMMITTEE ON HEALTH  
HOUSE OF REPRESENTATIVES  
SECOND SESSION 107TH CONGRESS

GULF WAR VETERANS' ISSUES

24 JANUARY 2002

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UNTIL RELEASED BY THE COMMITTEE ON VETERANS AFFAIRS  
SUBCOMMITTEE ON HEALTH



Mr. Chairman and members of the Veterans' Affairs Subcommittee, it is a pleasure to be here today and share some observations with you. I am Ronald R. Blanck, President of the University of North Texas Health Science Center at Fort Worth, Texas and former Surgeon General of the U.S. Army, having retired in July 2000.

Following the Persian Gulf War, investigations of the medical complaints of Gulf war veterans were hindered because relevant records were often inaccessible or nonexistent. Records that were available often lacked uniformity and accuracy and were generally not automated. At least partly in response, "deployment medical surveillance" became a priority of the Department of Defense. Recent advances in information management technology have enabled the development of a comprehensive public health surveillance system for the US Armed Forces.

The Defense Medical Surveillance System (DMSS) is the central repository of medical surveillance data for the US Armed Forces. Data in the DMSS document statuses of and changes in demographic and military characteristics (e.g., service, rank, military occupation) of all servicemembers. In addition, they document significant military (e.g., assignments, major deployments) and medical (e.g., ambulatory clinic visits, hospitalizations, immunizations, deaths) experiences of servicemembers throughout their military careers. The DMSS receives data from multiple sources and integrates it in a continuously expanding relational database. Longitudinal records are established and continuously updated for all individuals who have served in the Armed Forces since 1990.

All records in the DMSS are maintained in person, place and time frames of reference. The maintenance of person, place, and time relationships in the database permits, for example, nearly instantaneous assessments of the morbidity experiences of servicemembers who shared characteristics, were in specific locations, or had similar experiences on days or during periods of interest since 1990. The following are examples of the types of routinely collected data available in DMSS:

*Major deployments:* Since the Persian Gulf War, each Service has been required to document the participation of its members in specified major deployments. Electronic files listing participants in designated deployments—with start and end dates of each individual's participation—are provided by the Services to the Defense Manpower Data Center, which in turn provides the data to the DMSS. Currently, more than 1.2 million records document the participation of individuals in major overseas deployments.

*Pre- and post-deployment health assessments:* Pre- and post-deployment health assessments are used to assist the medical staffs of deploying and returning forces to identify the medical concerns of deployers at early clinical stages. Brief, standardized, self-administered questionnaires solicit categorical responses to questions regarding medical history, general health, and system-specific signs and symptoms. More than 435,000 pre- and post-deployment health assessment records are integrated in the DMSS.

*Hospitalizations (in fixed military medical facilities):* Since January 1990, records of all hospitalizations of active duty servicemembers in US military hospitals have been integrated in the DMSS. Each record documents up to eight discharge diagnoses that are coded using the International Classification of Disease, ninth revision, clinical modification (ICD-9-CM). The causes of injuries that result in hospitalizations are reported using standard North Atlantic Treaty Organization (STANAG) external cause of injury codes. In December 2001, more than 1.9 million hospitalizations of active duty servicemembers were documented in the DMSS.

*Ambulatory visits (to fixed military medical facilities):* Since approximately 1997, records of ambulatory visits of active duty servicemembers have been integrated in the DMSS. Each ambulatory visit record documents primary and up to three alternate diagnoses using the ICD-9-CM. In December 2001, more than 59.3 million ambulatory visits of active duty servicemembers were documented in the DMSS database.

*Serologic Specimens:* Servicemembers are routinely screened for antibodies to HTV-1 during pre-induction and periodic medical examinations, prior to overseas assignments, and before and after major overseas deployments. Since approximately 1990, serum remaining after routine HIV-1 antibody testing and sera collected before and after major deployments have been forwarded to the DoD Serum Repository (DoDSR). At the repository, specimens are stored in precisely documented locations in walk-in freezers at  $-30^{\circ}\text{C}$ . In the DMSS, serum identification numbers and repository locations are linked to dates of specimen collection and to personal identifiers of donors. More than 27 million serum specimens related to over 7.1 million individuals are currently stored in the DoDSR. Approximately 4.5 million individuals (60.5% of the total) have at least two specimens in the repository. The DoDSR adds a unique and powerful seroepidemiologic surveillance capability to the overall military medical surveillance program.

*Contact Information:* Further information regarding the availability, use or interpretation of data contained in DMSS or access to specimens in the DoD Serum Repository may be directed to the staff at the AMSA (202) 782-0471 (DSN: 662). POC:LTC(P) Mark Rubertone, MC, USA, Chief, Army Medical Surveillance Activity, US Army Center for Health Promotion and Preventive Medicine, (202) 782-0471 (DSN:662), e-mail: [mark.rubertone@amedd.army.mil](mailto:mark.rubertone@amedd.army.mil).

Statement of James W. Holsinger, Jr., M.D., Ph.D., Chancellor, Albert B. Chandler Medical Center, And Senior Vice President of the University of Kentucky, Lexington, Kentucky

Mr. Chairman and Members of the Committee, I am pleased to be here today to discuss the lessons learned from our experience following the Persian Gulf War. From 1990 to 1993, I served as Chief Medical Director and Under Secretary for Health in the Department of Veterans Affairs. In doing so I was responsible for developing VA's policies concerning the healthcare of Persian Gulf veterans returning to the United States, leaving the military forces of the US, and becoming veterans.

By 1991 I had served for over 20 years in the Department of Veterans Affairs. During most of this time, the VA was under siege concerning our response to the Agent Orange issues stemming from the Viet Nam War. Within a matter of months following the cessation of hostilities in the Persian Gulf, the health care concerns of veterans of this conflict, which later became known as Persian Gulf Syndrome, became evident. My deeply felt concern at this time was that America's veterans of this conflict not be subjected to similar insensitivity. As a result I issued instructions to all VA Medical Centers that veterans who complained of healthcare problems which they believed stemmed from their service in the Gulf be treated for these conditions just as we were then treating veterans of the Viet Nam War who claimed exposure to Agent Orange.

At the time that I issued this directive, the Department of Veterans Affairs did not have Congressional Authorization for this action. Following discussion within the Department, rather than withdrawing the directive, the Department issued regulations supporting my action. We continued to develop the Persian Gulf registry for veterans of this conflict and developed three specialized centers at VA Medical Centers to diagnose and treat veteran patients who could not be adequately diagnosed in the VA Medical Center closest to their homes. Chairman Sonny Montgomery understood the dilemma at an early date and introduced H.R. 5864 in the One Hundred and Second Congress. On September 16, 1992, he held hearings on the possible adverse health effects of service in the Persian Gulf and on VA's efforts to establish a Persian Gulf registry for tracking the healthcare status of these veterans. Then Deputy Secretary Anthony J. Principi and I appeared before the Committee representing the Department. The result of this hearing

was enactment of Public Law 102-25, Title VII, the "Persian Gulf War Veterans' Health Status Act," of November 4, 1992.

As we testified on September 16, 1992, the Veterans Health Administration was poised to act immediately upon enactment of enabling legislation to issue a directive entitled the Environmental Medicine Persian Gulf Program. I signed this directive on December 7, 1992. Throughout this period following the end of the Persian Gulf War until this directive was issued, the Veterans Health Administration was engaged in the treatment of Persian Gulf War veterans with symptoms to be later defined as Persian Gulf Syndrome. As Mr. Principi testified on September 16, 1992, we acted "Immediately, using the authority we now have, because we see an immediate need. But we are also asking the congress for additional authority..." Mr. Montgomery commended the Department for "getting ahead of the curve on this issue."

I believe that it is important to recognize that the present Secretary of Veterans Affairs, Mr. Principi, served as Deputy Secretary during our last conflict and during the intervening period he chaired the "Principi Commission on Servicemembers and Veterans Transitional Assistance." Clearly the nation is fortunate to have in Secretary Principi a person who fully and completely understands the healthcare issues that could arise from the War on Terrorism. In addition, the President of the United States has indicated his intent to nominate Dr. Robert H. Roswell for the position of Under Secretary for Health. Dr. Roswell served with me following the Persian Gulf War as the Associate Chief Medical Director for Clinical Programs. Dr. Roswell also clearly understands the potential issues resulting from armed combat.

What lesson did we learn from this experience? I believe that we were hampered in our efforts to provide health care for Persian Gulf War veterans by not having standby legislation available when we needed it. What do I mean? While waiting for the full support of the Congress we had to spend months waiting to get our expanded program initiated since enabling legislation was required. My one recommendation today is that this Committee should enact legislation that will establish standby authority for the Secretary of Veterans Affairs to develop and implement the examination of veterans of the current as well as future conflicts who may have unusual symptoms or complaints,

establish specialized treatment programs for these veterans, as well as establish the appropriate registry for tracking purposes. Based on our experience from the Viet Nam War as well as the Persian Gulf War, it is clear that as a nation we should expect difficult healthcare issues to arise in relationship to future combat situations. I believe that the veterans of future wars deserve to have expeditious care from the Department of Veterans Affairs and that this can best be accomplished by providing to the Secretary of Veterans Affairs the authority to establish the appropriate program in a timely fashion as the need arises.

Mr. Chairman, I appreciate the opportunity of appearing before you today.

**TESTIMONY OF DR. SUE BAILEY**  
**FORMER ASSISTANT SECRETARY OF DEFENSE**  
**FOR HEALTH AFFAIRS**  
**BEFORE THE**  
**UNITED STATES HOUSE OF REPRESENTATIVE**  
**VETERANS' AFFAIRS SUBCOMMITTEE ON HEALTH**  
**JANUARY 24, 2002**

Mr. Chairman, Thank you for the opportunity to testify before The Veterans' Affairs Subcommittee on Health on force readiness and veteran health.

In my role as Assistant Secretary of Defense for Health Affairs I was responsible for the Military Health System and was the principal advisor to the Secretary of Defense on health issues including force health protection. Prior to that position I served as Deputy Assistant Secretary of Defense where the department first encountered the growing controversy surrounding the post-deployment health issues of the Persian Gulf War.

In deployments in that war as well as Somalia, Bosnia, Albania, and Kosova the Department of Defense and the Government of the United States gained great insight into the importance of deployment force health protection. Applications of lessons learned will necessarily include improvements in:

- Pre and post deployments health assessments
- Troop monitoring systems
- Medical record systems
- Environmental and Biohazard assessments.

Since returning from deployments to Desert Shield and Desert Storm many veterans have complained of a variety of symptoms that have come to be known as "Gulf War Syndrome" To date there has been no scientific verification of a specific syndrome but both the Department of Defense and the Department of Veterans' Affairs have provided comprehensive medical examinations and treatment for Gulf War Veterans suffering any symptoms or illness. A program at The Deployment Health Clinical Center at Walter Reed Army Medical Center in conjunction with the Department of Veterans

Affairs is implementing illness assessment guidelines that will enhance post deployment healthcare to servicemembers and their families.

There has also been extensive research conducted to determine causes of physical symptoms as yet unexplained scientifically. An interagency Research Working Group continues to explore the potential health effects of deployments including long term studies such as an evaluation of the health of servicemembers during and after their military service. The Center for Deployment Health Research in San Diego has also developed a registry for monitoring reproductive outcomes and birth defects among families of servicemembers who have deployed.

At this time there is no clear evidence of any single environmental factor, or health related exposure that can explain the symptoms and illnesses of Gulf War veterans. It is essential that there be improved health surveillance and further research into the combined effects of multiple health related exposures before and during deployment, as well as the longitudinal studies that are currently underway.

Understanding the effects of deployment begin with baseline health assessments prior to mobilization and continue indefinitely during and following military service. Efforts to obtain these assessments, access them in the field, and record and monitor for surveillance, short and long term, have been hampered by the lack of an electronic health record system. Without application of currently available information system technology it will continue to be difficult to provide for health intervention related to personal health data or to apply epidemiological techniques so essential to deployment force health protection.

Appropriate deployment medical surveillance also depends upon accurate troop monitoring capabilities. During the Gulf War the location of units was well known but the movements of individuals within units was not. Computer models that would have provided invaluable data about health related exposures were dependent upon accurate troop location information. Many servicemembers experienced multiple health related exposures that can only be fully documented in relationship to their location at any given time. Improvements in troop monitoring would greatly enhance our ability to ensure safer and better-documented deployments in the future.

The United States Congress is to be commended for their investigations and subsequent recommendations that have resulted in improved conditions of deployment for our military forces and a healthier future for service retirees and veterans.

Mr. Chairman, thank you for the opportunity to testify today and I would be happy to answer any questions you or the committee may have.



Statement of Enrique Mendez Jr., M.D., before the Committee on Veterans' Affairs, Subcommittee on Health, January 24, 2002

Mr. Chairman and Members of the Committee, thank you for the invitation to appear before you today. I am Enrique Mendez Jr., M.D., Major General, United States Army, retired. From 1990 to 1993 I served as Assistant Secretary of Defense for Health Affairs in the Department of Defense.

I understand from your letter and a subsequent conversation with a member of your staff that the purpose of this hearing is to ascertain whether lessons learned from the Persian Gulf War have been integrated in present day deployments. These opening remarks were prepared with that objective in mind.

Operation Desert Shield, in response to the Iraqi invasion of Kuwait, commenced in the same year that I became Assistant Secretary and was followed by Operation Desert Storm in early 1991. The clarity of the recollections of the events of those days is affected, in my mind, by the passage of time and colored by the development of actions that have taken place in subsequent years. Nevertheless, I agree that the lessons learned in the past are indeed important to the way you react and operate in the future and that examination of such lessons is a worthwhile endeavor.

The health-related lessons learned before, during and following the Persian Gulf War can be grouped under certain broad categories:

- The need for improvement in the availability of data on individuals regarding predeployment health status, exposures during deployment and postdeployment health status.
- The need to improve the recording of medical information at all levels and having ready access to that data. The availability of a health record that includes deployment, immunization and exposure histories; a record that can transition

seamlessly from the Military Health System to the Veterans Health Administration.

- The need to communicate health information in a timely and understandable manner to troops, commanders and other leaders, medical personnel and other interested parties. This communication to be inclusive of possible hazards and risks as well as the why of actions aimed at protecting the health of personnel and is to continue with relevant information after deployment.
- The need to improve the identification and evaluation of health risks in a timely manner.
- The need for systematic assessment of symptoms that are not readily explained or undiagnosed conditions. The establishment of epidemiological studies.
- The need to continue work in developing new vaccines, determining possible long term effects of exposures and assessing the interactions of multiple exposures.

Many of the concerns and the actions that followed in those days were triggered by the possibility of the use of chemical and biological weapons against our personnel. Recent events further strengthen the need to educate and train health professionals in the diagnosis and care of casualties resulting from the possible use of weapons of mass destruction. As a former medical school dean I certainly support actions necessary for that to be implemented.

Mr. Chairman, thank you again for the opportunity to appear before you today.

## WRITTEN TESTIMONY OF

Dr. Garth L. Nicolson

COMMITTEE ON VETERANS' AFFAIRS  
Subcommittee on Health  
UNITED STATES HOUSE OF REPRESENTATIVES

January 24, 2002

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Dr. Garth Nicolson is currently the President, Chief Scientific Officer and Research Professor at the Institute for Molecular Medicine in Huntington Beach, California. He was formally the David Bruton Jr. Chair in Cancer Research, Professor and Chairman at the University of Texas M. D. Anderson Cancer Center in Houston, and Professor of Internal Medicine and Professor of Pathology and Laboratory Medicine at the University of Texas Medical School at Houston. He was also Adjunct Professor of Comparative Medicine at Texas A & M University. Among the most cited scientists in the world, having published over 520 medical and scientific papers, edited 14 books, served on the Editorial Boards of 20 medical and scientific journals, including the *Journal of Chronic Fatigue Syndrome*, and currently serving as Editor of two (*Clinical & Experimental Metastasis* and the *Journal of Cellular Biochemistry*), Professor Nicolson has held numerous peer-reviewed research grants. He is a recipient of the Burroughs Wellcome Medal of the Royal Society of Medicine, Stephen Paget Award of the Metastasis Research Society and the U. S. National Cancer Institute Outstanding Investigator Award.

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The most important question that this subcommittee must ask is whether the United States military health system failed in its important mission of Force Protection before, during and after the Gulf War. I believe strongly that it did, and the reason for this failure must be determined in order to better treat the chronic illnesses displayed by over 100,000 U.S. veterans of the Gulf War, including in some cases their immediate family members [1], and to prevent history from repeating itself in future deployments.

First, there is the issue of the initial denial the Gulf War veterans were ill in numbers more than expected for a deployed population of approximately 600,000 men and women. This has now been conclusively shown, and the data indicate that there are much higher prevalence rates of Gulf War Illnesses (GWI) in deployed than in non-deployed forces [2-4]. Case control studies of Gulf War veterans showed higher symptom prevalence in deployed than in non-deployed personnel from the same units [3,4]. For certain signs and symptoms, this difference was dramatic (some over 13-times greater in deployed than in the non-deployed group [3]). Steele [4] showed that in three studies, Gulf War-deployed forces had excess rates of GWI symptom patterns, indicating beyond a doubt that GWI is associated with deployment to the Gulf War.

Second, since it is now clear that the Gulf War produced delayed casualties beyond those expected, it is important to determine what caused these casualties so that measures can be employed to prevent this from occurring in future conflicts. An important corollary of this is that illnesses that occur in deployed personnel must be prevented from spreading to civilians [1]. We believe that GWI is caused by accumulated toxic insults (chemical, biological and in some cases radiological [5-8]) that result in chronic illnesses with relatively nonspecific signs and symptoms [5,9,10]. Unfortunately, some of these illnesses are apparently transmittable and can be passed to family members [1] and possibly to the general public.

## POST-TRAUMATIC STRESS DISORDER AND OBTAINING A DIAGNOSIS OF GWI

For years the Departments of Defense (DoD) and Veterans' affairs (DVA) promoted the notion that Post-Traumatic Stress Disorder (PTSD) was a major factor in GWI [11]. Most researchers doubt that stress is a major cause of GWI [6-9], and it certainly does not explain after the war why some immediate family members presented with GWI signs and symptoms [1,6-8]. Psychiatrists who have studied GWI do not believe that most GWI is explainable as PTSD [12], and researchers studying GWI find that it differs from PTSD, depression, somatoform disorder and malingering [8,13]. Although most GWI patients do not appear to have PTSD, they are often placed in this diagnosis category by DoD and DVA physicians. GWI can be diagnosed within ICD-10-coded diagnosis categories, such as fatiguing illness (G93.3), but they often receive a diagnosis of 'unknown illness.' This, unfortunately, results in their receiving reduced disability assessments and benefits and essentially little or no effective treatments because they don't fit within the military's or DVA's diagnosis systems. In addition, many active-duty members of the Armed Forces are hesitant to admit that they have GWI, because they feel strongly that it will hurt their careers or result in their being medically discharged. Officers that we have assisted eventually retired or resigned their commissions because of imposed limits to their careers [14].

*Prof. Garth L. Nicolson, Committee on Veterans' Affairs, Subcommittee on Health, 1/24/02*

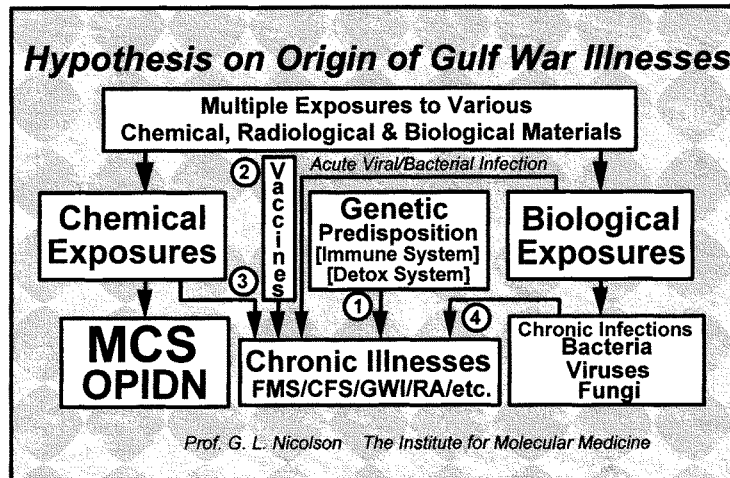
In the absence of contrary laboratory findings, some physicians feel that GWI is a somatoform disorder caused by stress, instead of organic or medical problems that can be treated with medicines or treatments not used for PTSD or other somatoform disorders [14]. The evidence offered as proof that stress or PTSD is the source of most GWI is the assumption that veterans were in a stressful environment during the Gulf War [14,15]. However, most GWI patients feel that PTSD is not an accurate diagnosis of their illnesses [14,15], and testimony to the House questions the notion that stress is the major cause of GWI [16]. The GAO has concluded that while stress can induce some physical illness, it is not established as a major cause of GWI [17]. Although stress can exacerbate chronic illnesses and suppress immune systems, most officers that we interviewed indicated that the Gulf War was not a particularly stressful war, and they strongly disagreed that stress was the origin of their illnesses [18]. However, in the absence of physical or laboratory tests that can identify possible origins of GWI, many physicians accept that stress is the cause [14,15,18]. The arthralgias, fatigue, memory loss, rashes and diarrhea found in GWI patients are nonspecific and often apparently lack a physical cause [19], but this may simply be the result of inadequate workup and lack of availability of routine tests that could define the underlying organic cause [6-8].

We have been trying for years to get the DoD and DVA to acknowledge that different exposures can result in quite different illnesses, even though signs and symptoms profiles may overlap [14,18]. Illness clusters similar to GWI can be found in non-Gulf War veterans deployed to Bosnia [2]. Although such epidemiological analyses have been criticized on the basis of self-reporting and self-selection [19], it remains important to characterize signs and symptoms and identify exposures of Gulf War veterans in order to find effective treatments for specific subsets of GWI patients [14,15,18]. Our contention is that GWI patients that suffer from chemical, biological or radiological exposures should receive different treatments based on their exposures [6-8].

Patients with GWI can have 20-40 or more chronic signs and symptoms [1-8]. Civilian patients with similar signs and symptoms are usually diagnosed with Chronic Fatigue Syndrome (CFS), Fibromyalgia Syndrome (FMS) or Multiple Chemical Sensitivity Syndrome (MCS) [6-8]. Although clear-cut laboratory tests on GWI, CFS and FMS are not yet available, some tests that have been used in recent years for GWI are not consistent with a psychiatric origin for GWI [20-26]. These results argue against a purely somatoform disorder. Recently the DVA has agreed to accept diagnoses of CFS and FMS for Gulf War veterans without confirmation of the origin of illness. This is a step in the right direction toward rectifying the problem of diagnosis of 'illness of unknown origin' or somatoform disorder.

#### **CHEMICAL, BIOLOGICAL & RADIOLOGICAL EXPOSURES DURING THE GULF WAR**

During the Gulf War personnel may have been exposed to chemical, biological and/or radiological substances that could be among the underlying causes of their illnesses [6-8]. Gulf War veterans were exposed to a variety of chemicals, including insecticides, such as the insect repellent N,N-dimethyl-m-toluamide, the insecticide permethrin and other organophosphates, fumes and smoke from burning oil wells, the anti-nerve agent pyridostigmine bromide, solvents used to clean equipment and a variety of other chemicals, including in some cases, possible exposures to low levels of Chemical Warfare (CW) agents [6-8]. Some CW exposure may have occurred because of destruction of CW stores in factories and storage bunkers during and after the war as well as possible offensive use of CW agents [27]. Although some feel that there was no credible evidence for CW exposure [19], many veterans have been notified by the DoD of possible CW exposures. Exposures to mixtures of toxic chemicals can result in chronic illnesses, even if the exposures were at low-levels [20,21,28,29]. Such exposures can cause a wide variety of signs and symptoms, including chronic neurotoxicity and immune suppression. Combinations of pyridostigmine bromide, N,N-dimethyl-m-toluamide and permethrin produce neurotoxicity, diarrhea, salivation, shortness of breath, locomotor dysfunctions, tremors, and other impairments in healthy adult hens [28]. Although low levels of individual organophosphate chemicals may not cause signs and symptoms in exposed, non-deployed civilian workers [30], this does not negate a causal role of multiple chemical exposures in causing chronic illnesses such as GWI. Organophosphate-Induced Delayed Neurotoxicity (OPIDN) [31] is an example of chronic illness that may be caused by multiple, low level chemical exposures (Figure 1). Multiple Chemical Sensitivity Syndrome (MCS) has also been proposed to result from multiple low level chemical exposures [32]. These syndromes can present with many of the signs and symptoms found in GWI patients, and many GWI cases may eventually be explained by complex chemical exposures.



**Figure 1.** Hypothesis on how multiple toxic exposures, including multiple vaccines (2), chemical (3), radiological and biological (4) exposures, may have resulted in GWI in predisposed, susceptible individuals (1) [modified from Nicolson et al., ref. 8].

In chemically exposed GWI patients, memory loss, headaches, cognitive problems, severe depression, loss of concentration, vision and balance problems and chemical sensitivities, among others, typify the types of signs and symptoms characteristic of organophosphate exposures. Arguments have been advanced by former military physicians that such exposures do not explain GWI, or that they may only be useful for a small subset of GWI patients [19]. These arguments for the most part are based on the effects of single agent exposures, not the multiple, complex exposures that were encountered by Gulf War veterans [33]. The onset of signs and symptoms of GWI for most patients was between six months and two years or more after the end of the war. Such slow onset of clinical signs and symptoms in chemically exposed individuals is not unusual for OPIDN [34]. Since low-level exposure to organophosphates was common in U.S. veterans, the appearance of delayed, chronic signs and symptoms similar to OPIDN could have been caused by multiple low-level exposures to pesticides, nerve agents, anti-nerve agents and/or other organophosphates, especially in certain subsets of GWI patients. Alternatively, chemically-exposed patients are known to be more susceptible to opportunistic infections, and the combination of chemical and biological exposures may be important for a large subset of GWI patients.

In addition to chemical exposures, personnel were exposed to burning oil well fires and raw petroleum as well as fine, blowing sand. The small size of sand particles (much less than 0.1 mm) and the relatively constant winds in the region probably resulted in some sand inhalation. The presence of small sand particles deep in the lungs can produce a pulmonary inflammatory disorder that can progress to pneumonitis or Al-Eskan Disease [35]. Al-Eskan disease, characterized by reactive airways, usually presents as a pneumonitis that can eventually progress to pulmonary fibrosis, and possibly immunosuppression followed by opportunistic infections. Although it is doubtful that many GWI patients have Al-Eskan Disease, the presence of silica-induced immune suppression in some soldiers could have contributed to persisting opportunistic infections in these patients.

Radiological exposures occurred in some personnel, probably a small number overall, during the Gulf War. Depleted uranium (DU) was used extensively in the Gulf War, and it remains in the environment as a contaminant. When a DU penetrator hits an armored target, it ignites, and between 10% and 70% of the shell aerosolizes, forming uranium oxide particles [36]. The particles that form are usually small (less than 5  $\mu\text{m}$  in diameter) and due to their high density settle quickly onto vehicles, bunkers and the surrounding sand, where they can be easily inhaled, ingested or re-aerosolized. Following contamination, the organs where DU can be found include the lungs and regional lymph nodes, kidney and

bone. However, the Armed Forces Radiological Research Institute (AFRRI) also found DU in blood, liver, spleen and brain of rats injected with DU pellets [37]. Studies on DU carriage should be initiated as soon as possible to determine the prevalence of contamination and extent of body stores of uranium and other radioactive heavy metals. Procedures have been developed for analysis of DU metal fragments [38] and DU in urine [39]. However, urine testing does not detect uranium in all body sites [37]. So far, analysis of DU-contaminated Gulf War veterans has not shown them to have severe signs and symptoms of GWI [39], but few Gulf War veterans have been studied for DU contamination. As with chemical exposures, radiological exposures result in immune suppression can contribute to an increased susceptibility to opportunistic infections.

#### BIOLOGICAL EXPOSURES AND GWI

The variable incubation times, ranging from months to years after presumed exposure, the cyclic nature of the relapsing fevers and other signs and symptoms, and the types of signs and symptoms of GWI are consistent with diseases caused by combinations of biological and/or chemical or radiological agents (Figure 1) [6-8]. System-wide or systemic chemical insults and/or chronic infections that can penetrate various tissues and organs, including the Central and Peripheral Nervous Systems, are important in GWI [6-8]. When chronic infections occur, they can cause most if not all of the complex signs and symptoms seen in CFS, FMS and GWI, including immune dysfunction and changes in blood chemistry [24,25]. Changes in environmental responses as well as increased titers to various endogenous viruses that are commonly expressed in these patients have been seen in CFS, FMS and GWI. Few infections can produce the complex chronic signs and symptoms found in these patients; however, the types of infection caused by *Mycoplasma* and *Brucella* species that have been found in GWI patients, can cause the complex signs and symptoms found in GWI [reviews: 23,40,41]. These microorganisms are now considered important emerging pathogens in causing chronic diseases as well as being important cofactors in some illnesses, including AIDS and other immune dysfunctional conditions [23,40,41].

Evidence for infectious agents has been found in GWI patients' urine [5] and blood [1,23,42-44]. We [1,42,43] and others [44] have found chronic pathogenic bacterial infections, such as *Mycoplasma* and *Brucella* infections, in a large subset of GWI patients. In studies of over 1,500 U. S. and British veterans with GWI, approximately 40-50% of GWI patients have PCR evidence of such infections, compared to 6-9% in the non-deployed, healthy population [review: 23]. This has been confirmed in a large study of 1,600 veterans at over 30 DVA and DoD medical centers (VA Cooperative Clinical Study Program #475). Historically, mycoplasmal infections were thought to produce relatively mild diseases limited to particular tissues or organs, such as urinary tract or respiratory system [23,40,41]. However, the mycoplasmas detected in GWI patients with molecular techniques are highly virulent, colonize a wide variety of organs and tissues, and are difficult to treat [23,45,46]. The mycoplasma most commonly detected in GWI, *Mycoplasma fermentans* (found in >80% of those GWI patients positive for any mycoplasma), is a slow-growing bacteria found inside cells in tissues. It is unlikely that this type of infection will result in a strong antibody response, which may explain the DoD's lack of serologic evidence for these types of intracellular infections [47]. When civilian patients with CSF or FMS were similarly examined for systemic mycoplasmal infections 50-60% of these patients were positive, indicating another link between these disorders and GWI [23]. In contrast to GWI, however, several species of mycoplasmas other than *M. fermentans* were found in higher percentages of CSF/ME and FMS patients [48,49].

#### SOME GWI INFECTIONS CAN SPREAD TO IMMEDIATE FAMILY MEMBERS

Recently we have documented the spread of GWI infections to immediate family members [1]. According to one U. S. Senate study [50], GWI has spread to family members, and it is likely that it has also spread in the workplace [18]. Although the official position of the DoD/DVA is that family members have not contracted GWI, these studies [1,50] indicate that at least a subset of GWI patients have a transmittable illness caused by a chronic infection. Laboratory tests revealed that symptomatic GWI family members have the same chronic infections [1] that have been found in ~40% of the ill veterans [42-44]. We examined military families (149 patients; 42 veterans, 40 spouses, 32 other relatives and 35 children) with at least one family complaint of illness) selected from a group of 110 veterans with GWI who tested positive (~41% overall) for mycoplasmal infections [1]. Consistent with previous results, over 80% of GWI patients who were positive for blood mycoplasmal infections had only one *Mycoplasma* species, *M. fermentans*. In healthy control subjects the incidence of mycoplasmal infection was 7%, several *Mycoplasma* species were found, and none of these subjects were found to have multiple mycoplasmal species (significant difference between patients and control subjects,  $P < 0.001$ ). In 107 family members of mycoplasma-positive GWI patients, there were 57 patients (53%) that had essentially the same signs and symptoms as the veterans and were diagnosed with CFS or FMS. Most of these patients (70.2%) also had mycoplasmal infections compared to non-symptomatic family members (significant difference between symptomatic family members and non-symptomatic family members,  $P < 0.001$ ). The most common species found in CFS patients in the same families as *M. fermentans*-positive GWI patients was also *M. fermentans*. Thus the most likely explanation is that certain subsets of GWI patients can transmit their illness and airborne *M. fermentans* infections to immediate family members who then present with CFS or FMS [1].

#### AUTOIMMUNE DISEASES AND INFECTIONS IN GULF WAR VETERANS

As chronic illnesses like GWI, CFS and FMS progress, there are a number of accompanying clinical problems, particularly autoimmune signs/symptoms, such as those seen in Multiple Sclerosis (MS), Amyotrophic Lateral Sclerosis (ALS or Lewy Gehrige's Disease), Lupus, Graves' Disease, Rheumatoid Arthritis and other complex autoimmune diseases. In part, this might be explained by intracellular microorganisms, such as mycoplasmal infections that can penetrate into nerve cells, synovial cells and other cell types [40,41]. The autoimmune signs and symptoms may be caused when intracellular pathogens, such as mycoplasmas, escape from cellular compartments and stimulate the host's immune system. Microorganisms like mycoplasmas can incorporate into their own structures pieces of host cell membranes that contain important host membrane antigens that can trigger autoimmune responses or their surface antigens may be similar to normal cell surface antigens. Thus patients with such infections may have unusual autoimmune signs and symptoms.

An example of this is Amyotrophic Lateral Sclerosis (ALS), an adult-onset, idiopathic, progressive degenerative disease affecting both central and peripheral motor neurons. ALS is present at higher incidence rates in Gulf War veterans than expected. Patients with ALS show gradual progressive weakness and paralysis of muscles due to destruction of upper motor neurons in the motor cortex and lower motor neurons in the brain stem and spinal cord, ultimately resulting in death, usually by respiratory failure [51]. We have recently investigated the presence of systemic mycoplasmal infections in the blood of Gulf War veterans and civilians with ALS [52]. Almost all ALS patients (~83% overall) show evidence of system-wide mycoplasmal infections, including 100% of Gulf War veterans with ALS. All Gulf War veterans with ALS were positive for *M. fermentans*, except one that was positive for *M. genitalium*. In contrast, the 22/28 civilians with detectable mycoplasmal infections had *M. fermentans* as well as other *Mycoplasma* species in their blood, and two of the civilian ALS patients had multiple mycoplasma species [52]. Of the few control patients that were positive, only two patients (2.8%) were positive for *M. fermentans* (significant difference between ALS patients and control subjects,  $P < 0.001$ ). The results support the suggestion that infectious agents may play a role in the pathogenesis and/or progression of ALS, or alternatively ALS patients are extremely susceptible to systemic mycoplasmal infections [52]. In the GWI patients mycoplasmal infections may have increased their susceptibility to ALS, which may explain the recent VA studies showing that there is an increased risk of ALS in Gulf War veterans.

#### SUCCESSFUL TREATMENT OF INFECTIONS IN GWI PATIENTS

Treatment of GWI can be complex and dependent on the types of exposures found in GWI patients. We have found that mycoplasmal infections in GWI, CFS, FMS and RA can be successfully treated with multiple courses of specific antibiotics, such as doxycycline, ciprofloxacin, azithromycin, clarithromycin or minocycline [45,46,53-55], along with other nutritional recommendations. Multiple treatment cycles are required, and patients relapse often after the first few cycles, but subsequent relapses are milder and most patients eventually recover [42,43]. GWI patients who recovered from their illness after several (3-7) 6-week cycles of antibiotic therapy were retested for mycoplasmal infection and were found to have reverted to a mycoplasma-negative phenotype [42,43]. The therapy takes a long time because the slow-growing microorganisms are localized deep inside cells in tissues where it is more difficult to achieve proper antibiotic therapeutic concentrations. Although anti-inflammatory drugs can alleviate some of the signs and symptoms of GWI, they quickly return after discontinuing drug use. If the effect was due to an anti-inflammatory action of the antibiotics, then the antibiotics would have to be continuously applied and they would be expected to eliminate only some of the signs and symptoms of GWI. In addition, not all antibiotics, even those that have anti-inflammatory effects, appear to work. Only the types of antibiotics that are known to be effective against mycoplasmas are effective; some have no effect at all, and some antibiotics make the condition worse. Thus the antibiotic therapy does not appear to be a placebo effect, because only a few types of antibiotics are effective and some, like penicillin, make the condition worse. We also believe that this type of infection is immune-suppressing and can lead to other opportunistic infections by viruses and other microorganisms or increases in endogenous virus titers. The true percentage of mycoplasma-positive GWI patients overall is likely to be somewhat lower than found in our studies (41-45%) [1,42,43] and those published by others (~50%) [44]. This is reasonable, since GWI patients that have come to us are probably more advanced patients with more progressed disease than the average GWI patient. Our diagnostic results have been confirmed in a large study DVA/DoD study (~40% positive for mycoplasmal infections, VA Cooperative Clinical Study Program #475). This DVA study is a controlled clinical trial that will test the usefulness of antibiotic treatment of mycoplasma-positive GWI patients. This clinical trial is based completely on our research and publications on the diagnosis and treatment of chronic infections in GWI patients [42,43,53-55]. This clinical trial is complete but the treatment results have not yet been analyzed. There is a major concern that the DoD/DVA will not be forthcoming about this trial. We have also found *Brucella* infections in GWI patients but we have not examined enough patients to establish a prevalence rate among veterans with GWI.

#### MULTIPLE VACCINES GIVEN DURING DEPLOYMENT AND GWI

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A possible source for immune disturbances and chronic infections found in GWI patients is the multiple vaccines that were administered close together around the time of deployment to the Gulf War. Unwin et al. [8] and Cherry et al. [56] found a strong association between GWI and the multiple vaccines that were administered to British Gulf War veterans. There is an association of the anthrax vaccine and GWI symptoms in British and Canadian veterans [2,57]. Steele [4] found a three-fold increased incidence of GWI in *nondeployed* veterans from Kansas who had been vaccinated in preparation for deployment, compared to non-deployed, non-vaccinated veterans. And Mahan et al. [58] found a two-fold increased incidence of GWI symptoms in U.S. veterans who recalled they had received anthrax vaccinations at the time of the Gulf War, versus those who thought they had not. These studies associate GWI with the multiple vaccines given during deployment, and they may explain the high prevalence rates of chronic infections in GWI patients [59,60].

Signs and symptoms similar if not identical to GWI have been found in personnel who recently received the anthrax vaccine [59,60]. On some military bases this has resulted in chronic illnesses in as many as 7-10% of personnel receiving the vaccine [60]. The chronic signs and symptoms associated with anthrax vaccination are similar, if not identical, to those found in GWI patients, suggesting that at least some of the chronic illnesses suffered by veterans of the Gulf War were caused by military vaccines [59,60]. Undetectable microorganism contaminants in vaccines could have resulted in illness, and may have been more likely to do so in those with compromised immune systems. This could include individuals with DU or chemical exposures, or personnel who received multiple vaccines in a short period of time. Since contamination with mycoplasmas has been found in commercial vaccines [61], the vaccines used in the Gulf War should be considered as a possible source of the chronic infections found in GWI. Some of these vaccines, such as the filtered, cold-stored anthrax vaccine, are prime suspects in GWI, because they could be easily contaminated with mycoplasma infections and other microorganisms [62]. Minor contamination of military vaccines may not be a health problem under ordinary circumstances, but with the stress of deployment and the administration of multiple vaccines within a few days, personnel could have been immune suppressed and more susceptible to minor contaminants in some vaccine lots.

#### INADEQUATE RESPONSES OF THE DOD AND DVA TO GWI

I feel strongly that the response to the GWI problem has been inadequate, and it continues to be inadequate [14,15]. This response started with denial that there were illnesses associated with service in the Gulf War, it has continued with denial that what we (biological exposures) and others (chemical exposures) have found in GWI patients are important in the diagnosis and treatment of GWI, and it continues today with the denial that military vaccines could be a major source of GWI. For example, in response to our publications and formal lectures at the DoD (1994 and 1996) and DVA (1995), the DoD stated in letters to various members of Congress and to the press that *M. fermentans* infections are commonly found, not dangerous and not even a human pathogen, and our results have not been duplicated by other laboratories. These statements were completely false. The Uniformed Services University of the Health Sciences taught its medical students for years that this type of infection is very dangerous and can progress to system-wide organ failure and death [63]. In addition, the Armed Forces Institute of Pathology (AFIP) has been publishing for years that this type of infection can result in death in nonhuman primates [64] and in man [65]. The AFIP has also suggested treating patients with this type of infection with doxycycline [66], which is one of the antibiotics that we have recommended [53-55]. Interestingly, U.S. Army pathologist Dr. Shih-Ching Lo holds the U. S. Patent on *M. fermentans* ("Pathogenic Mycoplasma" [67]), and this may be the real reason that in the response to our work on *M. fermentans* infections in GWI, guidelines were issued that GWI patients should *not* be treated with antibiotics like doxycycline, even though in a significant number of patients it had been shown to be beneficial. The DoD and DVA have also stated that we have not cooperated with them or the CDC in studying this problem. This is also not true. We have done everything possible to cooperate with the DoD, DVA and CDC on this problem, and we even published a letter in the Washington Post indicating that we have done everything possible to cooperate with government agencies on GWI issues, including formally inviting DoD and DVA scientists and physicians to our Institute for Molecular Medicine to learn our diagnostic procedures. We have been and are fully prepared to share our data and procedures with government scientists and physicians. The DVA has responded with the establishment of VA Cooperative Clinical Study Program #475, but many Gulf War Referral Centers at VA Medical Centers continue to be hostile to the non-psychiatric treatment of GWI. The DoD and DVA continue to deny that family members of GWI patients can contract illness or that there could be an infectious basis to GWI.

#### DOD/DVA SCORECARD ON GWI FROM PREVIOUS TESTIMONY

In my testimony to the U. S. Congress in 1998 [14,18], some suggestions were made to correct for the apparent lack of appropriate response to GWI and the chronic infections found in GWI patients. It seems appropriate to go back and revisit these suggestions to see if any of these were taken seriously or corrected independently (*Updates in italics*). Note that similar comments were presented today to another House of Representatives subcommittee [15].

1. We must stop correct the notion that immediate family members cannot contract illnesses from veterans with GWI. Denial that this has occurred has only angered veterans and their families and created a serious public health problem,



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including spread of illnesses to the civilian population and contamination of our blood supply. *This item has still not been taken seriously by the DoD. The DVA has initiated a study to see if veterans' family members have increased illnesses; however, they have decided to group GWI patients together independent of the possible origins of their illness. Since veterans who have their illness primarily due to chemical or environmental exposures that are not transmittable will be grouped with veterans who have transmittable chronic infections, it is unlikely that studying family members of both groups together will yield significant data. Whether intentional or not, this DVA study has apparently been designed to fail. Potential problems with the nation's blood and organ tissue supply due to contamination by chronic infections in GWI and CFS patients are considered significant [68,69], but no U.S. government agency has apparently taken this seriously. In a recent study in Europe approximately 6.4% of patients with CFS reported that their signs and symptoms were linked to blood transfusions [70].*

2. The diagnosis system used by the DoD and DVA to determine illness diagnosis must be overhauled and replaced by the ICD-10 system. The categories in the older ICD-9 system have not kept pace with new medical discoveries in the diagnosis and treatment of chronic illnesses. This has resulted in large numbers of patients from the Gulf War with 'undiagnosed' illnesses who cannot obtain treatment or benefits for their medical conditions. *The DoD and DVA should be using the ICD-10 diagnosis system where a category exists for chronic fatiguing illnesses (G93.3). Apparently little progress in this area has been made by the DoD or DVA.*

3. Denying claims and benefits by assigning partial disabilities due to PTSD should not be continued in patients that have organic (medical) causes for their illnesses. For example, patients with chronic infections that can take up to or over a year to successfully treat should be allowed benefits. *The DVA has recently shown some flexibility in this area. For example, Gulf War veterans with ALS will receive disability without having to prove that their disease was deployment-related. Similarly, GWI patients with M. fermentans infections (and also their symptomatic family members with the same infection) should receive disabilities. Thus far there has been no attempt to extend disability to GWI-associated infectious diseases. Instead of waiting for years or decades for the research to catch up to the problem, the DoD and DVA should simply accept that many of the chronic illnesses found in Gulf War veterans are deployment related and deserving of treatment and compensation. Progress has been made in the acceptance that CFS and FMS in GWI veterans will be considered for deployment-related disabilities.*

4. Research efforts must be increased in the area of chronic illnesses. Unfortunately, federal funding for such illnesses is often rebudgeted or funds removed. For example, Dr. William Reeves of the CDC in Atlanta sought protection under the 'Federal Whistle Blower's Act' after he exposed misappropriation of funds allocated for CFS at the CDC. It is estimated that over 3% of the adult U.S. population suffers from chronic fatiguing illnesses similar to GWI, yet there are few federal dollars available for research on the diagnosis and treatment of these chronic illnesses, even though each year Congress allocates such funds. *There has been some progress at NIH on this issue, but in general little has changed. The DoD and DVA have spent most of the hundreds of millions of dollars allocated for GWI research on psychiatric research. Most of these funds have been spent on studies that have had negligible effect on veterans' health. More effort must be put into chemical, biological and/or radiological causes for GWI rather than more psychiatric studies.*

5. Past and present senior DoD and DVA administrative personnel must be held accountable for the utter mismanagement of the entire GWI problem. This has been especially apparent in the continuing denial that chronic infections could play a role in GWI and the denial that immediate family members could have contracted their illnesses from veterans with GWI. This has resulted in sick spouses and children being turned away from DoD and DVA facilities without diagnoses or treatments. The responsibility for these civilians must ultimately be borne by the DoD and DVA. I believe that it is now accountability time. The files must be opened so the American public has a better idea how many veterans and civilians have died from illness associated with service in the Gulf War and how many have become sick because of an inadequate response to this health crisis. *Unfortunately, little or no progress has been made on these items for the last decade or more, and the situation has not changed significantly since my last testimony to the U.S. House of Representatives [14] in 1998. Similarly, our earlier testimony to House Subcommittees was apparently disregarded as well [71,72].*

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*Prof. Garth L. Nicolson, Committee on Veterans' Affairs, Subcommittee on Health, 1/24/02*

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*Under penalty of perjury, I swear that the statements above are true and correct to the best of my knowledge, information and belief.*

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*Testimony of*



**NATIONAL GULF WAR RESOURCE CENTER**

**Submitted by**

**Stephen L. Robinson  
Executive Director**

**Before the**

**Subcommittee on Health  
House Committee on Veterans' Affairs**

**Regarding**

**Lessons learned from the Gulf War**

**January 24, 2002**

Mr. Chairman and other distinguished members of the Committee, on behalf of National Gulf War Resource Center (NGWRC), we are pleased to have this opportunity to present our views with respect to the issue of Lessons Learned from the Gulf War. In this statement, we will discuss Lessons Learned from the veteran advocate and end user perspective. NGWRC is most appreciative of your inviting us to submit testimony and to provide a statement for the record in this matter, and for your leadership in seeking to insure the Lessons Learned are actually implemented. We believe this hearing will generate the action needed to protect future veterans and insure that those fighting the war on terrorism today do not repeat policy failures from the Gulf War.

More than decade ago, U.S. Forces were deployed to fight in a war that would be won in a matter of hours rather than years. The speed of battle and the technology that was employed ensured our success as we achieved our objectives. Generals were lauded as heroes and soldiers returned home to parades and fanfare. Many soldiers left the military immediately upon return and others continued to serve. Not long after the Gulf War veterans began to report symptoms and illness. Some veterans believed they were ill as a result of their service during the war. The President of the United States and the Department of Defense made a critical decision at this moment in time that I believe will soon be the most studied and dissected decision of my generation. The leadership of our government had to choose what to do, tell the truth about what soldiers faced during the Gulf War or begin a long protracted Public Affairs campaign designed to delay the truth, control the story and fund the coffers of beltway contractors.

“Its all in your head” Lessons Learned from the gulf war.

To understand what we have learned we must first understand what we believed prior to the Gulf War.

What we believed then

We were told we were the best-trained, best-equipped army in the world and that we should expect 60% casualties going into the breach. The Iraqi Army was the third largest army in the world.

What we know now

Our leaders were given overstated intelligence assessments about the Iraqi Army and the threat. We went to war with defective chemical suits. Chemical and biological agent alarms were purchased and sent to the field even though it was known in 1988 they didn't work. The fox vehicles capabilities were not fully understood before deployment and Khamisiyah was a known chemical weapons storage facility prior to the Gulf War.

**What we believed then**

Anthrax, Botoxin and other weapons of mass destruction will be used as offensively against coalition forces therefore we should inoculate our forces to protect them and we wont tell them what shots they are getting. We will violate all standing policy on the use of investigational new drugs because "Here at DoD, we believe we know what's best for soldiers".

**What we know now**

It is not rational to inoculate for every perceived threat and strain of biological agent or chemical weapon. Usually, inoculation occurs when you intend to use a weapon offensively, because it is almost certain that some of it will blow back onto your own forces. The decision to give U.S. forces the anthrax vaccine made no sense; the vaccine was only approved for cutaneous anthrax and is still not FDA approved for inhalation anthrax, using it to protect against weapons grade offensively deployed inhalation anthrax was an experiment. This experiment continues today on postal workers who must waive their rights to sue Bioport should they have a severe systemic reaction. We also know that the Department of Defense is so far into bed with Bioport that it does not matter how many times Bioport deceives the nation, fails inspection and harms soldiers. DoD will be there for the former JCS and his foreign owned company. We also know that the use of pyridostigmine bromide as a pretreatment for Sarin exposure was an experiment. Conventional wisdom says you don't give healthy people drugs designed for severely sick people, especially if you do not know what the long-term health effects will be. These decisions and others that were violations of human testing in any other setting are what I now call the "Black Beret Factor". The BBF factor is the suspension of common sense, regardless of all conventional wisdom, and the implementation of policy even though its in violation of standing law or directly harms the end user.

**What we believed then.**

We believed DoD would look at what happened to Gulf War veterans and provide accurate reports that were sound in methodology and investigational practices. We believed DoD would fund studies and research that would seek to find answers. We believed that DoD would be forthcoming, revealing any intelligence that would unravel the mystery of Gulf War illnesses. We believed that "No stone would be left unturned". We believed the mistakes made during the Gulf War would result in Lessons Learned that would be implemented to protect soldiers in future conflicts to come.

**What we know now.**

DoDs investigational methodology is suspect and leans away from the veteran. In doing so, the veteran has suffered for the last 10 years waiting to be recognized and compensated fairly for injuries incurred during service to their country. We know that the vast majority of research conducted was funneled to beltway contractors who realized the gravy train that the investigation would produce. We know that independent research was crushed, stalled, demonized and ridiculed by the Office of the Special Assistant for Gulf War Illnesses.



We know that DoD has not been forthcoming in revealing the important intelligence matters of the Gulf War and as they begin to conclude the Gulf War investigation there are several areas of intelligence and investigation that they have conveniently ignored. We know they did not turn every stone. They turned selected stones. We know that DoD is not implementing the Lessons Learned from the Gulf War that was passed into law. This blatant disregard for their own policy endangers soldiers who are called to deploy into hazardous areas of the world where chemical and biological agents may be used in time of war. We know that the truth will come out, it always does.

The question here today is, do we have the courage to invest in the truth today so that we protect the soldier of tomorrow?

**National Gulf War Resource Center  
Funding Statement**

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**Testimony of**

**VIETNAM VETERANS OF AMERICA**

**presented by**

**Patrick G. Eddington  
Associate Director of Government Relations**

**Before the**

**Subcommittee on Health**

**House Committee on Veterans Affairs**

**Regarding**

**Lessons Learned from the Gulf War**

**January 24, 2002**

Chairman Moran, Ranking Member Filner, and other distinguished members of the subcommittee, Vietnam Veterans of America (VVA) is pleased to have this opportunity to provide testimony on "lessons learned" from the Gulf War and their impact on our current force health protection policy. I wish I could report to you that we believe the Departments of Defense and Veterans Affairs have actually learned the key lessons from the Gulf War. In fact, they have not. Our testimony today will catalogue a lengthy list of continuing problem areas. I'll start with the issue of basic force protection.

#### **Environmental Threat Detection and Defense**

Prior to the Gulf War, administration officials assured the public and the troops that American forces would employ the best nuclear, biological, and chemical (NBC) defense technology in the world. Only years after the war did the public learn that the standard American gas mask in use at the time—the M17A1/A2-series mask—had failure rates of 26-44%.<sup>1</sup> Moreover, the Marine Corps logistics system actually *ran out* of replacement gas mask filters only *three days* into Desert Storm.<sup>2</sup> The harsh desert environment wreaked havoc on the masks, suits, and gloves used by the troops. Had Iraqi forces used large quantities of chemical or biological agents on the battlefield, American and Coalition forces would not have been able to handle the resulting casualties, and the war's outcome could have been far different. Even without massive NBC agent use by Iraq, questions about the health implications of those sub-lethal exposures linger today.

In the years immediately after the war, when reports of Gulf War-related illnesses began to mount, veterans and members of Congress began to question DoD's assertions that no chemical agents had been detected during the war. As documentary evidence grew that multiple chemical agent detections had indeed occurred, Pentagon officials shifted their stance: *all* NBC alarms had been false, we were told. That canard was refuted by the Pentagon's *own* internal assessment (classified for years) that the Czechoslovak chemical units' agent detection claims were valid, though Defense Department officials continued to maintain that all of the *American* alarms had been false. All of this raises an obvious question: if the NBC detection equipment used by American forces during the war was so unreliable, why did the Pentagon continue to buy *exactly* the same kinds of equipment for years after the Gulf War?

To VVA's knowledge, neither Armed Services committee has addressed this issue in detail, which has direct relevance for this subcommittee as well. For if we are continuing to buy defective or inadequate NBC detection equipment for our forces, how can we be sure our troops are properly protected from the full-range of NBC threats? Conversely, if the equipment *has* worked as advertised, then DoD's claims of "all alarms false" is itself untrue. Pentagon officials cannot have it both ways. And if DoD has lied about the capabilities of the NBC defense equipment it has purchased, how can we believe DoD's claims that low-level chemical exposures will not have long-term adverse health effects?

The General Accounting Office (GAO) addressed the issue of low-level chemical exposures in a September 1998 report, in which DoD officials admitted that their NBC detection doctrine

does not address low-level exposures on the battlefield because there is no (1) validated threat, (2) definition of low-level exposures, (3) or consensus on the effects of such exposures. Moreover, if low-level exposures were to be addressed, DoD officials said that the cost implications could be significant.<sup>3</sup>

In other words, it would be *too expensive* to protect American troops from such exposures, even though, as GAO pointed out,

Past research by DoD and others indicates that single and repeated low-level exposures to some chemical warfare agents can result in adverse psychological, physiological, behavioral, and performance effects that may have military implications.<sup>4</sup>

During the 1990's, GAO repeatedly questioned the Pentagon's progress in addressing these and other major NBC equipment and training problems. While a November 2000 GAO report on individual unit NBC readiness found considerable improvement in the services' ability to properly equip forces for operating in an NBC environment<sup>5</sup>, training and readiness reporting deficiencies remain. A more recent GAO report found that "In general, DoD has not successfully adapted its conventional medical planning to chemical/biological warfare."<sup>6</sup>

VVA has seen no evidence that the Pentagon is taking the potential health risks of low-level NBC exposures seriously, despite mounting scientific evidence that such exposures do indeed pose risks, as the 2000 Institute of Medicine (IOM) report *Gulf War and Health, Volume One* has suggested. Congress should carefully evaluate DoD's current NBC detection technology to determine if previous equipment acquisitions were made under false pretenses or whether DoD officials have engaged in a public relations disinformation campaign to discredit valid wartime chemical detections as a means of deligitimizing Gulf War illnesses. We believe any serious investigation will quite likely find the latter explanation to be the true one.

If the Defense Department's approach to NBC threat detection has been negligent, its approach to biomedical defense has been equally troubling.

Seeking a preemptive medical response to the Iraqi chemical warfare threat, in the fall of 1990 the Defense Department obtained an investigational new drug (IND) exemption from the Food and Drug Administration to use a drug, pyrodostigmine bromide (PB), as a chemical warfare prophylactic. Ostensibly, PB was intended to protect the troops from the effects of nerve gas exposure. During Desert Storm, at least 250,000 Army troops swallowed one or more of the little white pills. Taking PB was not optional; troops who refused faced punishment under the Uniform Code of Military Justice.

After years of denying there was a problem with PB, Bernard Rostker (the Pentagon's point man on Gulf War illnesses) told the Senate Veterans Affairs committee in 1998 that PB should never have been given to U.S. soldiers. Rostker admitted that DoD's "threat assessment" had been wrong, that Iraq had probably not in fact weaponized the nerve agent soman, the effects of which PB was thought to be capable of countering. Given its potential effects on the brain's neurotransmission process, PB has long been suspected as a cause of the neurological problems reported by so many Gulf War veterans. Amazingly, PB is still in the Pentagon's NBC medical formulary, and Department officials have said they may still use PB in future conflicts, if the "threat assessment" so warrants.

In a similar vein, the Pentagon's infatuation with vaccine-based biological defense has already proved to be a costly military and public health failure.

Prior to Desert Storm the Pentagon sought to employ a 20-year old anthrax vaccine as a biological warfare prophylactic. Even though this vaccine had never been approved by the FDA for such a use, the Pentagon managed to secure FDA acquiescence and proceeded to inoculate an estimated 150,000 troops with one or more doses of the vaccine. Because use of the vaccine was classified at the time, medical record keeping in this area was compromised, and the true effects of the vaccine on the wartime recipients remains unknown.

Seven years after the end of the war, the Pentagon resumed the inoculations under the rubric of the force-wide Anthrax Vaccine Inoculation Program (AVIP). Shortly after the AVIP began, reports of severe system adverse reactions to the vaccine began to emerge in the press. Over the next three years, a number of key facts about the vaccine would emerge, data that would once again highlight the Pentagon's wanton disregard for both the truth and the health of servicemembers. Consider these facts:

- At the beginning of the AVIP, DoD officials claimed the systemic adverse reaction rate for the vaccine was a mere .2%. During its investigation of the AVIP, GAO found data suggesting systemic adverse reaction rates in the range of 5-14%, dozens of times higher than Pentagon had claimed.<sup>7</sup>
- A calendar year 2000 GAO survey of National Guard and Reserve forces found systemic adverse reaction rates being reported by almost *one quarter* of respondents.<sup>8</sup>
- Only last week, the *Army Times* reported on the preliminary results of a Navy study that showed evidence of an increased incidence of birth defects in children born to mothers who had received the anthrax vaccine, compared to a control group of mothers who had not.<sup>9</sup>
- The FDA has yet to certify that Bioport Corporation, the vaccine's manufacturer, has successfully corrected major problems discovered at the production plant three years ago.

Given the AVIP's abysmal track record, all of us should be deeply concerned about the Joint Vaccine Acquisition Program (JVAP), the \$322 million cost-plus biowarfare vaccine program initiated in 1998 by the Pentagon's Joint Program Office for Biological Defense.

The JVAP calls for the Dynport Corporation to develop at least three, and possibly as many 12, additional biological warfare vaccines over the next decade. What happens when you give a human being a dozen or more BW vaccines? Nobody knows. Not DoD, NIH, CDC, the World Health Organization or any other medical or scientific body.

Will these vaccines actually work against a real threat? Again, nobody knows; no challenge or efficacy studies have been conducted in animals, so far as VVA is aware. This means that the JVAP is a giant biowarfare defense gamble; it assumes that our enemies will field weapons that our vaccines will defeat. As with so many other things, the Gulf War experience is instructive here.

Prior to the Gulf War, American intelligence agencies believed that Iraq had weaponized both anthrax and botulinum toxoid. Post-war United Nations inspections verified the estimate. Only in 1995 did the world learn that Iraq also had weaponized aflatoxin, an obscure but potentially deadly plant fungus. Had Saddam's late son-in-law Hussein Kamal not defected to Jordan and revealed it, Iraq's aflatoxin program would have remained hidden from the international community...despite the most intrusive arms control inspection effort in history.

Contrary to Pentagon claims that the AVIP and JVAP are based on "threat assessments," the reality is that American intelligence agencies will almost never be able to provide a truly accurate picture of a potential opponent's BW capabilities. Thus, our NBC biomedical force protection approach should be based on an honest approach to the uncertainties in this arena. We would offer the following prescriptions for change.

First, the Defense Department must field chemical-biological detection systems and protective masks that work. The Pentagon has for years failed to procure workable, reliable, real-time BW detection equipment, functional protective masks, and reliable chemical-biological protective suits. Had Saddam's forces used aflatoxin during the Gulf War, the attack would have gone undetected until the onset of symptoms months, or perhaps years, later. Providing proper protection up front is key to helping preclude death or debilitating injury, both at the time and for the life of the veteran.

Second, the Pentagon should abandon its self-defeating reliance on vaccine-based defense. Given the dozens of microorganisms and toxins available to rogue states, it is scientifically and fiscally impossible for the United States government to engineer vaccines against all such threats. Even if money were no impediment, there is no evidence the human body could successfully absorb the number of biowarfare vaccines Pentagon bureaucrats plan on foisting on the troops. Military planners should emphasize rapid detection, decontamination, and post-exposure medical evaluation and treatment in the event of a confirmed attack.

Finally, the Congress must end the FDA's double standard approach to civilian and military medicine, which at present represents a violation of basic scientific standards. Lawmakers must ensure that the FDA applies the same testing, monitoring, and enforcement standards for drugs and biologics used by the military that it applies to the civilian market. Anything less reduces America's military volunteers to the status of involuntary guinea pigs.

### Force Health Protection

One of the principal impediments to determining the roots of Gulf War illnesses has been the lack of reliable data from the wartime period: data on the precise numbers and types of vaccines and drugs given to the troops; data on the number, duration, and concentration of various chemical exposures; data on the kinds of medical tests and examinations performed on troops before, during, and after the conflict. For VVA, this is a core issue and a long-time complaint about the DoD-VA approach to veteran health care. Neither agency is truly committed to creating what we call a "cradle-to-grave" military medical history. Without such an instrument, determining how a veteran became ill becomes next to impossible, as does filing a claim for service-connected disability compensation.

The IOM stated so explicitly in its 2000 report *Protecting Those Who Serve: Strategies to Protect the Health of Deployed U.S. Forces*. In reviewing the recommendations of the multitude of commissions and panels that had previously assessed DoD force health protection efforts during the 1990's, the IOM noted that

Many of the recommendations are restatements of recommendations that have been made before, recommendations that have not been implemented. Further delay could jeopardize the accomplishment of future missions. The committee recognizes the critical importance of integrated health risk assessment, improved medical surveillance, accurate troop location information, and exposure monitoring to force health protection. Failure to move briskly on these fronts will further erode the traditional trust between the service member and the leadership.<sup>10</sup>

In VVA's view, absolutely nothing has changed since the IOM issued this report more than a year ago. Perhaps the best way to illustrate this point is to peruse the medical examination forms currently in use by the Pentagon.

The pre- and post-deployment health assessment forms used by the Pentagon's Deployment Health Center at Walter Reed Army Medical Center contain no questions about the specific environmental hazards the servicemember may have encountered in theater. Moreover, even though the AVIP has been the most highly publicized DoD vaccination program in recent history, **there is no space on this form specific to the anthrax vaccine**, despite the fact that the anthrax vaccine is considered a **mandatory** inoculation for those heading to designated "high threat" areas such as the Persian Gulf and Korea.



Neither the pre- or post-deployment health assessment forms contain detailed questions about other shots received or pills taken by the service member while in theater. No space on either form is dedicated to mandatory lab tests to detect evidence of infection from diseases endemic to the theater(s) where the service member was deployed. ***Indeed, the DoD medical form used during examinations of service dogs is more comprehensive in tracking vaccinations than the one used to track shots given to the troops.***

Section 765 of the 1998 National Defense Authorization Act (PL 105-85) requires the Defense Department to conduct both pre-and post-deployment health examinations (to include mental health screenings and the drawing of blood samples) to accurately record the medical condition of members before their deployment and any changes in their medical condition during the course of their deployment. VVA has seen no evidence whatsoever that any of these conditions are being met. On the basis of the IOM's report and DoD's failure to automatically collect and record environmental exposure and other data and record it in the service member's medical record, VVA would argue that DoD is in material breach of the law. As several members of the full House Veterans Affairs committee are also members of the Armed Services committee, VVA would respectfully suggest that those members call for immediate hearings to investigate DoD's failure to comply with the law and its potential long-term implications for American veterans.

In addition, any such investigation should examine why it is that we still do not have a single, easily transferable military medical record for servicemembers that moves seamlessly from the DoD health system to the VA once the servicemember leaves the force. Our understanding is that the DoD-VA interagency group responsible for managing this effort has yet to produce a working system, despite millions of dollars and years of development effort. Our view is that without stringent accountability mechanisms—in the form of fixed project milestones and severe financial penalties for failure to deliver a working product—no progress will be possible in this area. Congress should set these milestones and accountability mechanisms in place, then follow up to ensure the program achieves its goal of a single, seamless military medical record for life.

#### **Gulf War Medical Research and Treatment Initiatives**

Central to the pursuit of scientific truth is the assumption that bureaucratic political influences will not be allowed to shape—or quash—scientific inquiry. For years, Gulf War veterans and their supporters have had ample reason to believe that in the quest for the truth about Gulf War illnesses, bureaucratic protectionism and careerism—not scientific objectivity—has been the driving force behind the Pentagon's Office of the Special Assistant for Gulf War Illnesses (OSAGWI), now known as the Directorate for Deployment Health Services.

On August 28, 2000, Dr. Michael Kilpatrick, OSAGWI's "Medical Outreach and Issues" coordinator, dispatched a blistering letter to Rear Admiral Frederic G. Sandford, USN (ret.), Executive Director of the Association of Military Surgeons of the United States. Kilpatrick expressed his "disappointment in the peer review process and editorial oversight of *Military*

*Medicine*,” the armed forces premiere medical journal published by Sanford. An article written by Desert Storm veteran Dr. Andras Koréyni-Both had been published in the May 2000 edition of the magazine. Koréyni-Both’s central thesis—that the fine-grained sand of Saudi Arabia, Iraq, and Kuwait might have precipitated the veteran’s illnesses by compromising their immune systems—had sent Kilpatrick into orbit.

Kilpatrick alleged that Koréyni-Both’s “Al Eskin Disease” was based on “the author’s repeated presentation of this theory rather than on medical data gathered on Gulf War veterans.” In reality, Koréyni-Both cited autopsy results from 86 Desert Storm veterans presented in a National Institutes of Health report in 1994. The autopsies—performed at the Pentagon’s Armed Forces Institute of Pathology—showed considerable sand contamination in the lungs of the deceased veterans.

In his letter to Rear Admiral Sanford, Kilpatrick also accused Koréyni-Both of using material “written by individuals convinced there is an efficient, effective government cover-up about ‘dirty tricks’ played on military members by sinister leadership in the Pentagon or ‘the government.’” Kilpatrick alleged that “The authors appear to believe ‘If I say this often enough, it becomes truth.’” That statement far more accurately describes the Pentagon’s “There is no Gulf War illness” mantra.

For more than five years after the Gulf War ceasefire, Pentagon officials vehemently denied that American troops were exposed to chemical agents during or after Desert Storm...only to reverse themselves after declassified intelligence reports revealed American troops had inadvertently destroyed Iraqi chemical weapons at Khamisiyah, Iraq in March 1991. I note for the record that many of these documents were made public only as a result of lengthy and expensive FOIA litigation by veteran’s advocates or intense media scrutiny of the Pentagon’s response to the needs of sick Desert Storm veterans.

During the war, then-Secretary of Defense Richard Cheney and then-Joint Chiefs Chairman Colin Powell repeatedly assured the Congress, the public, and the troops that specialized biowarfare medications given to protect American troops were “safe and effective.” All of these claims were ultimately proven false. The Pentagon’s credibility has been destroyed not by alleged conspiracy theorists, but by the Pentagon itself.

Indeed, in his screed to Rear Admiral Sanford, Kilpatrick continued to repeat the falsehood that with regards to the Khamisiyah incident, “no reports of symptoms” were noted among American troops. In reality, American combat engineers had no idea they were destroying chemical weapons at the time; medical personnel were not poised to monitor the troops for *any level* of chemical exposure. Moreover, as the 2000 Institute of Medicine *Gulf War and Health, Volume One* report makes clear, there is a paucity of animal or other research on the effects of sustained low-level nerve agent exposure...and what data does exist supports the idea that even *small* exposures to these substances can be harmful. For Kilpatrick, this alleged lack of data represents a lack of evidence of adverse health effects for veterans...a scientifically bankrupt position at best.

OSAGWI's chief medical officer ended his diatribe by claiming Koréyni-Both's work was "more appropriate for an *X-Files* script, not a medical journal." Kilpatrick's derisive, paranoid tone speaks volumes about the mindset of Pentagon policymakers. Kilpatrick's attack on Koréyni-Both's research was clearly calculated to silence dissent within the Pentagon's medical establishment.

American troops continue to serve in the Gulf on a daily basis. Any medical data suggesting that long-term exposure to the tiny Arabian sand particles may be damaging to the immune system has clear implications for the health of active duty, Guard, and Reserve personnel deployed to the region...as well as for the nearly 200,000 Gulf War veterans who have sought compensation for service-connected ailments. Dismissing peer reviewed research that suggests further investigation is needed invites the charge of dereliction of duty.

VVA takes no position—pro or con—regarding Dr. Koreyni-Both's hypothesis. I have spent considerable time discussing this episode to help illustrate a key fact: efforts by Pentagon or VA officials to deny non-federal researchers the opportunity to have their theories on Gulf War illnesses put to the test through an open, unbiased peer-review process are real, not imaginary.

Indeed, through the use of the Freedom of Information Act, we have developed evidence that presents the definite appearance that senior OSAGWI officials were actively blocking the provision of information to VA clinicians regarding Project Shipboard Hazard and Defense (SHAD), the 1960's era Pentagon chemical and biological warfare testing program that involved the use of live chemical and biological warfare agents on American military personnel. My colleague from the National Gulf War Resource Center, Steve Robinson, can provide this committee with numerous, eyewitness examples of the efforts of senior OSAGWI officials to delay, deflect, or otherwise discredit efforts to link environmental exposures to Gulf War illnesses. Sergeant First Class (SFC) Robinson worked in OSAGWI for three years, and VVA would strongly suggest that the full House Veterans Affairs committee avail itself of SFC Robinson's experience and insight into the problems surrounding OSAGWI's handling of the Pentagon's Gulf War illness "investigations."

Because DoD and VA bureaucrats have politicized the medical research arena and monopolized control over research funding decisions, it is completely impossible for most non-federal researchers with unconventional or controversial theories about the origins of Gulf War illnesses to receive federal funding. Moreover, both DoD and VA have an inherent conflict of interest when it comes to investigating these kinds of issues.

Consider the following. When the Bridgestone/Firestone "exploding tire" scandal erupted, the Congress did not tell the manufacturer, "We trust you: go investigate yourself, make recommendations for change, then implement those changes...you have our blessing!" Congress held hearings and monitored the National Highway Transportation Safety Administration's investigation of Bridgestone/Firestone. The same model applies to airline crashes. Congress does

not rely on the aircraft manufacturers crash report; it listens to the National Transportation Safety Board's investigators, who are independent of both the manufacturer and the aviation industry as a whole. Congress set up this system to ensure that no conflict of interest would compromise safety investigations, a wise and sensible approach to transportation safety policy.

Yet for the last decade, the Congress has allowed the agency that most likely created the Gulf War illness problem (DoD), and the agency charged with paying for the problem (i.e., the VA, through health care and disability payments to sick veterans), to both investigate Gulf War illnesses and their own role in responding to sick Desert Storm veterans. This is an obvious conflict of interest, one that has prolonged the suffering of the veterans, destroyed their trust in the federal government, and resulted in the waste of at least \$150 million over the past five years through OSAGWI, as the Defense Department has "investigated" its own response to Gulf War illnesses. It is also how the Pentagon and the Air Force have managed to squander over \$180 million on Agent Orange-related Ranch Hand research that has produced less than half-a-dozen peer-reviewed scientific papers over the last 15 years.

To end this conflict of interest and restore integrity to the process of investigating and treating veteran's medical conditions, last year VVA called for the creation of a National Institute of Veterans Health (NIVH) within NIH. This notional NIVH would not only eliminate the conflict of interest problem outlined above, it would provide a vehicle for establishing a medical research corporate culture focused on *veteran health care*, in contrast to the current VA medical corporate culture of "health care that happens to be for veterans."

VVA recognizes that the VA has established a reputation for providing advanced care for blinded veterans or those with severe ambulatory impairments. *However, the VA has never truly developed a corporate culture focused on the diagnosis and treatment of the full range of environmental and occupational hazards that are unique to military service.* This is especially true of the VA's Research and Development Office, where the overwhelming majority of VA-funded research programs are geared towards medical problems found in the general population, not those specific to the veteran patient population or those with military service.

By establishing a new NIVH with veteran advocates serving on the peer-review panels that make research funding decisions, the Congress would be creating a research institute that would be truly focused on the unique medical needs of veterans. Locating the NIVH within NIH would ensure that the full medical resources of the federal government and private sector could be marshaled in a rational, veteran-friendly environment, free of the politicizing and conflict-ridden influences that have for more than 20 years precluded effective research into the unique environmental and occupational hazards that have impacted the health of American veterans.

Additionally, this proposed NIVH must be supplemented by the creation of a Congressionally directed mandatory declassification review panel, whose purpose would be to screen (on both a historical *and* an ongoing basis) and declassify any operational or intelligence records for evidence of data that would have an impact on the health and welfare of American

veterans. The need for such an entity—completely independent from the Pentagon and the U.S. intelligence community—is obvious.

Even today, thousands of pages of Gulf War-related records remain classified. In January 1998, the CIA admitted that its own internal review had identified over *1 million* classified documents with potential relevance to Gulf War illnesses. Virtually no documents associated with the 1960's era SHAD program have been declassified, and DoD has thus far rebuffed VVA's FOIA requests that the documents be made public. Through the experience of the Kennedy Assassination Review Commission and the Nazi War Crimes Declassification Review panel, we have learned that such specialized declassification panels work well. If we are to be certain that *all* data that may effect the health of American veterans is to be available for the veterans and their physicians, the Congress must create such a standing declassification review panel immediately. Such a move would also help to restore trust and confidence among veterans in the federal government and its response to veteran's health issues.

VVA believes that the VA should remain in the veteran health care business, but only if there is a dramatic change in the corporate culture of the Veterans Health Administration (VHA).

During his tenure as Undersecretary for Health, Dr. Thomas Garthwaite put forward a proposal known as the Veterans Health Initiative (VHI). The purpose of the VHI was to put veteran patient care at the core the VHA's corporate culture. As Dr. Garthwaite testified before this subcommittee last April,

The Veterans Health Initiative was established in September 1999 to recognize the connection between certain health effects and military service, prepare health care providers to better serve veteran patients, and to provide a data base for further study...

The components of the initiative will be a provider education program leading to certification in veterans' health; a comprehensive military history that will be coded in a registry and be available for education, outcomes analysis, and research; a database for any veteran to register his military history and to automatically receive updated and relevant information on issues of concern to him/her (only as requested); and a Web site where any veteran or health care provider can access the latest scientific evidence on the health effects of military service.<sup>11</sup>

VVA's experience has been that there is considerable resistance to this idea within VHA, particularly within the Office of Public Health and Environmental Hazards.

We note that to date, comprehensive clinical practice guidelines and continuing medical education courses in dealing with Gulf War illnesses have yet to be distributed throughout the VA medical system. Moreover, as the attached September 2000 email shows, senior officials in Public Health and Environmental Hazards resisted creating a registry for Vietnam era SHAD veterans. As many members of this committee may recall, there was tremendous resistance by VHA to the idea of creating a Gulf War registry in the early 1990's; it took an act of Congress to get that effort off the ground. Given this institutional resistance to identifying environmental

hazards and their impact on the health of veterans from multiple eras, how can we trust these same individuals to implement Dr. Garthwaite's well-conceived vision for veterans' health care?

We have communicated these concerns to Secretary Principi, urging him to recognize that changing the existing VHA corporate culture immediately is imperative, and we look forward to working with him towards that end. VVA believes that this subcommittee, and the full committee as a whole, can play a key role in this process by concurrently encouraging Secretary Principi to take whatever measures are necessary to accomplish this objective.

Mr. Chairman, this concludes my written statement. On behalf of our national president, Tom Corey, please accept my thanks for allowing VVA the opportunity to share our views on this very important topic.

Vietnam Veterans of America  
Testimony before the Subcommittee on Health, HVAC  
Lessons Learned from the Gulf War

January 24, 2002

**VIETNAM VETERANS OF AMERICA  
Funding Statement  
January 24, 2002**

Vietnam Veterans of America (VVA) is a national non-profit veterans membership organization registered as a 501(c)(19) with the Internal Revenue Service. VVA is also appropriately registered with the Secretary of the Senate and the Clerk of the House of Representatives in compliance with the Lobbying Disclosure Act of 1995.

VVA is not currently in receipt of any federal grant or contract, other than the routine allocation of office space and associated resources in VA Regional Offices for outreach and direct services through its Veterans Benefits Program (Service Representatives). This is also true of the previous two fiscal years.

For Further Information, Contact:

Director of Government Relations  
Vietnam Veterans of America  
(301) 585-4000, extension 127

**Patrick G. Eddington**

Patrick G. Eddington was an award-winning military imagery analyst at the CIA's National Photographic Interpretation Center for almost nine years. He received numerous accolades for his analytical work, including letters of commendation from the Joint Special Operations Command, the Joint Warfare Analysis Center and the CIA's Office of Military Affairs.

During his tenure at CIA, Eddington worked a wide range of intelligence issues. His analytical assignments included monitoring the break-up of the former Soviet Union; providing military assessments to policy makers on Iraqi and Iranian conventional forces; and coordinating the CIA's military targeting support to NATO during Operation Deliberate Force in Bosnia in 1995.

Eddington received his undergraduate degree in International Affairs from Southwest Missouri State University in 1985. While at the CIA, Eddington took a one-year sabbatical to attend Georgetown University, earning a master's degree in National Security Studies. Eddington spent eleven years in the U.S. Army Reserve and the National Guard in both enlisted and commissioned service.

Currently, Eddington serves as Associate Director of Government Relations for Vietnam Veterans of America. Eddington's opinion pieces have appeared in a number of publications, including the *Washington Post*, *Los Angeles Times*, *Washington Times*, *Fort Worth Star-Telegram*, and the *Army Times*, among others. Eddington is a frequent commentator on national security issues for the Fox News Channel, MSNBC, SKYNews, CNN, and other domestic and international television networks. His first book, *Gassed in the Gulf*, was featured on the September 20, 1997 edition of CSPAN's "About Books" program.

Eddington is a member of the Authors Guild and Amnesty International. He also serves on the board of directors of the James Madison Project, a Washington, D.C.-based nonprofit advocacy organization focusing on 1st Amendment issues as they relate to national defense, foreign affairs, intelligence, and veterans policy. He and his wife Robin live in Alexandria, Virginia.



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- <sup>1</sup> *Marine Corps NBC Defense in Southwest Asia*, Marine Corps Research Center, Research Paper # 92-0009, July 1991, p. 11. Obtained by the author via the Freedom of Information act in 1995.
- <sup>2</sup> Message from the commanding general, First Fleet Services Support Group to CDRAMCCOM, Critical Deficiency, Gas Mask Components, 201458Z January 1991. Obtained by the author via the Freedom of Information act in 1995.
- <sup>3</sup> *Chemical Weapons: DoD Does Not Have a Strategy to Address Low-Level Exposures*. GAO/NSIAD-98-228. September 1998, p. 5.
- <sup>4</sup> *Ibid.*, p. 4.
- <sup>5</sup> *Chemical and Biological Defense: Units Better Equipped, But Training and Readiness Reporting Problems Remain*. GAO-01-27, October 2000.
- <sup>6</sup> *Chemical and Biological Defense: DoD Needs to Clarify Expectations for Medical Readiness*. GAO-02-38, October 2001, p. 2.
- <sup>7</sup> *Medical Readiness: Safety and Efficacy of the Anthrax Vaccine*. Testimony before the Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, U.S. House of Representatives. GAO/T-NSIAD-99-148, April 29, 1999, p. 4.
- <sup>8</sup> *Anthrax Vaccine: Changes to the Manufacturing Process*. Testimony before the Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform, U.S. House of Representatives. GAO-02-181T, October 23, 2001, p. 6.
- <sup>9</sup> "CDC warns civilians anthrax vaccine may be linked to birth defects," *Army Times*, January 21, 2002, p. 22.
- <sup>10</sup> *Protecting Those Who Serve: Strategies to Protect the Health of Deployed U.S. Forces*. National Academy Press (Washington: 2000), p. 2.
- <sup>11</sup> Statement of Thomas L. Garthwaite, MD, Under Secretary for Health, Department of Veterans Affairs. Before the Subcommittee on Health, Committee on Veterans' Affairs, U. S. House of Representatives, April 3, 2001



OFFICE OF THE SECRETARY OF DEFENSE  
1000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1000

AUG 28 2000

RADM Frederic G. Sanford, MC, USN, Ret.  
Executive Director  
Association of Military Surgeons of the United States  
9320 Old Georgetown Road  
Bethesda, Maryland 20814

Dear RADM Sanford:

I would like to express my disappointment in the peer review process and editorial oversight of Military Medicine, which resulted in the publication of the article "The Role of the Sand in Chemical Warfare Agent Exposure among Persian Gulf War Veterans: Al Eskan Disease and 'Dirty Dust'" in the May 2000 volume, authored by COL András L. Korényi-Both, MC, USARNG, et al.

The fact that this paper recognizes Al Eskan Disease as an entity is based entirely on the authors' repeated presentation of this theory rather than on medical data gathered from Gulf War veterans. References used to support the authors' position are news media articles about the theory, presentations the authors made and books written by individuals convinced there is an efficient, effective government cover-up about "dirty tricks" played on military members by sinister leadership in the Pentagon or "the government." The authors appear to believe "If I say this often enough, it becomes truth."

While sections of the May 2000 article have data from sophisticated, scientific examinations of sand particles, there are no data from studies of Gulf War veterans or inhabitants of the theater of operations. The authors make a point that none of the studies detected sulfur, but they continue to believe sulfur was part of the sand composition. They use the aerodynamic physics of gas stream particle separation processes to state what happens in the human body, with no human studies to validate their assumptions. Their discussion of immune reactions uses data from animal studies, but weaves in further theories as if they were fact. Examples of such theories are stating sand "could easily trigger multiple chemical sensitivity" and "It may lead to an uncontrolled spread of opportunistic infections, e.g., mycoplasma incognitus, and could intensify the effects of sub-lethal exposure to biological warfare agents."

When they discuss nerve agent presence on the battlefield, they use the many anecdotal stories from people who were there and people who were not. They have ignored or used out of context the work guided by the Office of the Special Assistant to the Deputy Secretary of Defense for Gulf War Illnesses, which is available on the internet at [www.gulflink.osd.mil](http://www.gulflink.osd.mil). The low-level exposure to sarin and cyclosarin from demolition of munitions at Khamisiyah has been well described. There were no chemical alarms reported as having alerted during this event and no reports of symptoms occurring in the US troops there. We have evaluated the French and



Czech detections and determined no source for the positive findings. Modeling the release from bunkers bombed during the air campaign has not shown any American troops were exposed to these agents. The British never confirmed any alarms for CW agents.

The authors' reference to dirty dust from World War I is not given, and this tactic spawns urban legends. Their discussion of the persistence of mustard is true, but Iraq did not use this agent offensively on the battlefield. Coalition bombing of bunkers storing mustard is presumed to have destroyed much of it in the resultant conflagration. Modeling has indicated that any airborne release could not have reached distant US troop positions. The demolition of munitions at Khamisiyah released only sarin and cyclosarin, but they were rapidly denatured by sunlight and moisture. The authors' description of CW delivery to the body by absorption to sand is pure speculation. Their use of mathematical formulas to prove their theory is sleight of hand, not science.

The rest of the paper extracts information from various reports and documents, uses it out of context, and builds a story with great imagination. The Pentagon "Dusty Agent Action Working Group" recommending "a special rubber poncho with a checkerboard camouflage design" is such an example. While such a group was formed, it focused on mustard agent remaining in the area from the Iran-Iraq war and the threat it might pose to US troops. The reference the authors cite says nothing about a checkerboard camouflage design rubber poncho.

The authors' conclusion that the curse of Tutankhamen and the "mystery disease" of Laurence of Arabia might have been Al Eskan Disease Phase I and II, respectively, clearly demonstrates this manuscript was more appropriate for an X-Files script, not for a medical journal.

Sincerely,

  
Michael E. Kilpatrick, MD, FACP  
Medical Outreach & Issues

Mather, Susan H

From: Otchin, Neil S  
Sent: Tuesday, September 26, 2000 9:53 AM  
To: Epley, Robert, VBAVACO; Holohan, Thomas V; Claypool, Robert G  
Cc: Otchin, Neil S; Mather, Susan H; Brown, Mark A  
Subject: FW: Project Shad draft directive

Our office would appreciate your informal review of the attached draft (which has been changed to an "Information Letter rather than a Directive). Please provide your comments to Dr. Mather by 10/3/00. Thanks, Neil

-----Original Message-----  
From: Mather, Susan H  
Sent: Monday, September 25, 2000 4:52 PM  
To: Otchin, Neil S; Brown, Mark A; Malaskewicz, Helen  
Cc: De Vesty, Robert  
Subject: RE: Project Shad draft directive

b5

I would rather go with an Information Letter. The "strawman" gets awfully close to another Registry and I don't think we want to go there.



I am attaching my "strawman" which plagiarizes



13 SHAD draft document.doc

Neil's freely sm

-----Original Message-----  
From: Otchin, Neil S  
Sent: Monday, September 25, 2000 2:59 PM  
To: Mather, Susan H; Brown, Mark A; Malaskewicz, Helen  
Cc: Otchin, Neil S; De Vesty, Robert  
Subject: Project Shad draft directive

As discussed attached is the "strawman" draft directive. Neil << File: shad draft directive doc >>

Mather, Susan H

From: Brown, Mark A  
Sent: Tuesday, October 31, 2000 9:48 AM  
To: Ochin, Neil S; Bailey, Shirley T  
Cc: Mather, Susan H; Dembling, Doug; Benson, Jim  
Subject: RE: SHAD IL

And another thing . . .

Rostker has put a hold on material that was intended for VA clinicians. I can see why we would use the Coordinating Board for reviewing risk communication oriented material intended for a general public audience. [REDACTED] b5 ↓

Mark Brown

-----Original Message-----  
From: Ochin, Neil S  
Sent: Tuesday, October 31, 2000 7:41 AM  
To: Bailey, Shirley T  
Cc: Ochin, Neil S; Mather, Susan H; Dembling, Doug; Brown, Mark A; Benson, Jim  
Subject: FW: SHAD IL

SB, per message from Dr. Mather below, please do not proceed with final approval and publication of the SHAD IL as requested by DoD. Thanks, Neil

-----Original Message-----  
From: Mather, Susan H  
Sent: Monday, October 30, 2000 9:40 PM  
To: Ochin, Neil S  
Subject: FW: SHAD IL

[REDACTED] b5 ↓

-----Original Message-----  
From: [REDACTED]  
Sent: [REDACTED]  
To: [REDACTED]  
Cc: [REDACTED]  
Subject: [REDACTED] b2/b6 ↓

Susan,

We spoke with Dr. Rostker about the SHAD Information Letter this afternoon. He is concerned about the IL's risk communication impact outside the target audience and would like it coordinated through the MWRCB for risk communication. I am also assembling some additional information to clarify the use of certain language which should also be included. I know that you are out of town until next Friday, and will work with Dr. Ochin.

STATEMENT OF  
PAUL A. HAYDEN, ASSOCIATE DIRECTOR  
NATIONAL LEGISLATIVE SERVICE  
VETERANS OF FOREIGN WARS OF THE UNITED STATES  
BEFORE THE  
SUBCOMMITTEE ON HEALTH  
COMMITTEE ON VETERANS' AFFAIRS  
UNITED STATES HOUSE OF REPRESENTATIVES  
WITH RESPECT TO  
THE DEPARTMENTS OF DEFENSE (DOD) AND  
VETERANS AFFAIRS (VA) IMPLEMENTATION OF  
LESSONS LEARNED FROM THE PERSIAN GULF WAR

WASHINGTON, D.C.

JANUARY 24, 2002

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

On behalf of the 2.7 million members of the Veterans of Foreign Wars of the United States and its Ladies Auxiliary, I would like to thank you for the opportunity to participate in today's important hearing. We appreciate that after 11 years, the Veterans' Affairs Committee's interest in the health and well-being of our nation's Persian Gulf War veterans has never wavered.

In its 1998 Report of the Special Investigation Unit on Gulf War Illness, the Senate Committee on Veterans' Affairs stated that the "Gulf War experience can be seen as a microcosm for continued concerns regarding our nation's military preparedness and ability to respond effectively to health problems that may arise after deployments." We agree.

Among others, the report pointed out that "U.S. military forces were unprepared to fight a war in which chemical or biological weapons might be used" and "both [DOD] and [VA] gave insufficient priority to matters of health protection, prevention, and monitoring of troops when they [were] on the battlefield and thereafter when they [became] veterans." Further, and in our opinion, the most grievous finding was the failure of both agencies to "collect information adequately about, keep good health records on, and produce reliable and valid data to monitor the health care and compensation status of Gulf War veterans" who were ill following their deployment to the Persian Gulf. As a result, basic research questions could not be answered; and thousands of Persian Gulf War veterans continue to suffer from undiagnosed illnesses.

So the question now remains: Are DOD and VA implementing lessons learned from their handling of the Gulf War Illness issue in their current operations?

With your permission, I would like to summarize some relevant background information. Soon after the revelation that coalition forces were exposed to low-level nerve agents from the destruction of Iraqi ammunition stores at Khamisiyah, Iraq, DOD formed the Office of Special Assistant for Gulf War Illness (OSAGWI). OSAGWI was established to determine causes of Gulf War illnesses and to recommend to the Secretary of Defense changes in policy to reduce future risks.

Three years later, in the fall of 1999, the Special Oversight Board for DOD Investigations of Gulf War Chemical and Biological Incidents recommended, "OSAGWI consider transitioning from an organization that conducts retrospective investigations to a more prospective agency that would ensure that the military services successfully apply the force health protection lessons learned in the Gulf and elsewhere."

The new Office of the Special Assistant for Gulf War Illnesses, Medical Readiness, and Military Deployments (OSAGWIMRMD) is charged with continuing to search for answers to Gulf War illnesses; however, as its name suggests, it is now responsible for a much broader role within DOD to change and update doctrine and policy surrounding force health protection before, during, and after deployments.

In your invitation to testify, you identified six areas of overlapping concern. I will confine my remarks to those areas as they were identified then and according to OSAGWIMRMD, as they are being practiced now.

THEN: Baseline troop health assessments were not systematic.

NOW: To assess troops state of health before and after deployments, they are required to fill out forms DD Form 2795, Pre-Deployment Health Assessment, and DD Form 2796, Post-Deployment Health Assessment. We note the absence of occupational specialty as a question.

THEN: Information on troop movements was scant.

NOW: DD Form 2796, Post-Deployment Health Assessment, asks the troops for their deployment location, country, and name of operation. This is too broad. We would hope for specific Global Positioning System data, especially after the difficulty DOD had in identifying troops exposed at Khamisiyah.

THEN: Determination of exposure to biohazards was problematic.

NOW: DOD conducts medical surveillance. Medical surveillance is defined as the regular or repeated collection, analysis, and dissemination of uniform health information for monitoring the health of a population. Therefore, DOD should be able to determine if troops are exposed. DOD has also sought to improve chemical detection monitoring equipment.

THEN: Vaccines were administered haphazardly and vaccine records were unclear.

NOW: As part of military preventative medicine, DOD's 1993 Directive 6205.3 established policy and guidance for immunization for biological warfare defense. Unfortunately, we were unable to access this document, so we will reserve judgment. SF 601, Health Record-Immunization Record, which is part of the troops permanent outpatient record, is still the primary source of recording vaccines. SF 601's information is supplemented by the entries on the International Certificate of Vaccines.

THEN: Physical assessments of troops were not comprehensive.

NOW: As required by Section 765 of PL 105-85, DOD is required to perform pre-deployment medical examinations and post-deployment medical examinations to include the drawing of blood. All of these exams are to be retained in a centralized location to improve future access. We would be interested in knowing if every troop deployed in the current Operation Enduring Freedom received this type of physical exam.

Taken at face value, it would appear that DOD has addressed its past problems by implementing lessons learned. We believe it is important to note, however, the recent finding by the Institute of Medicine (IOM) in its report, *Protecting Those Who Serve*, (the recommendations of which the VFW concurs) which stated, "few concrete changes have been made at the field level... the most important recommendations remain unimplemented, despite the compelling rationale for urgent action." Additionally, a January 8, 2002, New York Times article seems to back this finding. A Pentagon official in deployment health described the new mind-set in military health care as "trying to train people to ask questions, which is a change in military culture... Senior leaders need to understand that there is a major shift." While OSAGWIMRMD and DOD have received input from numerous expert panels, and have sought to implement changes based on lessons learned, it is our opinion that they have failed to carry out DOD-wide changes in an effective and efficient manner. They are not entirely to blame though, as institutional barriers are oftentimes hard to overcome. We know that change comes slowly and even slower in the military.

We believe that only a total commitment from the highest levels of DOD coupled with aggressive congressional oversight can ensure swift enactment. The Secretary and his subordinates must make this a priority and hold commanders accountable for implementing



change. We concur with the chair of the IOM Committee on Strategies to Protect the Health of Deployed U.S. Forces that “while the accomplishment of the mission always will be the paramount objective, soldiers must know that their health and well-being are taken seriously. Failure to move briskly to incorporate these procedures (improved medical surveillance, accurate troop location, exposure monitoring, etc...) will erode the traditional trust between the servicemember and the military leadership, and could jeopardize the mission.”

Up to this point, our testimony has focused primarily on DOD, and rightly so, because in order for VA to properly care for and compensate a veteran, it depends on accurate and timely information from the veteran’s military health record. We believe that every veteran is entitled to a comprehensive life-long medical record of illnesses and injuries they suffer, the care and inoculations they receive, and their exposure to different hazards. Further, the transfer of this record from DOD to VA should be seamless. While we recognize the efforts of the Military and Veterans Health Coordinating Board, communication between the two agencies needs to be streamlined so that data can be given to front-line health care and benefit providers. Because that is not always the case, the problem experienced by veterans in the past, and not just Persian Gulf veterans, has been their inability to convince VA that their disability is service connected. According to Title 38, USC, the burden of proof is placed upon the veteran.

In cases such as these, Congress has a long history of creating presumptives for specific cases such as Vietnam veterans and exposure to Agent Orange and presumption for service connection due to undiagnosed illnesses for Persian Gulf veterans. VA’s regulatory process, however, interpreted the intent of the Persian Gulf law differently and left many veterans still fighting for compensation benefits. We note with disappointment that the argument between VA and Congress lasted until just last month. We are, on the other hand, pleased that a solution was found. This committee must be prepared to offer timely solutions in the future.

In addition, we are very pleased with Secretary Principi’s recent action to get out in front of science and service-connect Persian Gulf veterans with ALS. We would hope that future Secretaries would act similarly given the situation. Further, it is our understanding that the congressionally mandated Persian Gulf Illness Public Advisory Committee is soon to become a reality. This is a positive step, and we believe future deployment specific advisory committees will be useful.

The VA, however, must remain vigilant in its role as the chief advocate for our nation's veterans; and once again, Congress must use its powers of oversight and legislation to ensure that future generations of veterans receive the care they were promised by a grateful nation. As a Persian Gulf veteran and VFW member, I can only hope that we have helped to make the road for future veterans a little easier to travel.

This concludes my testimony and I will be happy to answer any questions you or members of this subcommittee may have at this time.

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Health, Committee on  
Veterans' Affairs, House of Representatives

For Release on Delivery  
Expected at 9:00 p.m.  
Thursday, January 24, 2002

## VA AND DEFENSE HEALTH CARE

### Progress Made, but DOD Continues To Face Military Medical Surveillance System Challenges

Statement for the Record by Cynthia A. Bascetta  
Director, Health Care—Veterans'  
Health and Benefits Issues



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Mr. Chairman and Members of the Committee:

We are pleased to submit this statement for the record on the Department of Defense's (DOD) efforts to establish a medical surveillance system that enables DOD—along with the Department of Veterans Affairs (VA)—to respond to the health care needs of our military personnel and veterans. A medical surveillance system involves the ongoing collection and analysis of uniform information on deployments, environmental health threats, disease monitoring, medical assessments, and medical encounters. It is also important that this information be disseminated in a timely manner to military commanders, medical personnel, and others. DOD is responsible for developing and executing this system and needs this information to help ensure the deployment of healthy forces and the continued fitness of those forces. VA also needs this information to fulfill its missions of providing health care to veterans, backing up DOD in contingencies, and adjudicating veterans' claims for service-connected disabilities. Scientists at VA, DOD, and other organizations also use this information to conduct epidemiological studies and research.<sup>1</sup>

Given our current military actions responding to the events of September 11, and what has been reported about DOD's medical surveillance activities during the Gulf War and Operation Joint Endeavor, you expressed concern about the challenges DOD faces in establishing a reliable medical surveillance system.<sup>2</sup> This statement focuses on reports GAO,<sup>3</sup> the Institute of Medicine (IOM), the Presidential Advisory Committee on Gulf War Veterans' Illnesses,<sup>4</sup> and others have issued over the past several years. This statement is also based on interviews we held in early

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<sup>1</sup>Epidemiology is the scientific study of the incidence, distribution, and control of disease in a population.

<sup>2</sup>United States and allied nations deployed peacekeeping forces to Bosnia beginning in December 1995 in support of Operation Joint Endeavor, the NATO-led Bosnian peacekeeping force.

<sup>3</sup>See list of related GAO products at the end of this statement.

<sup>4</sup>The President established this committee in May 1995 to conduct independent, open, and comprehensive examinations of health care concerns related to Gulf War service. The committee consisted of physicians, scientists, and Gulf War veterans.

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October 2001 with various Defense Health Program officials, including officials from the Army Surgeon General's Office.<sup>5</sup>

In summary, GAO, the Institute of Medicine, and others have reported extensively on weaknesses in DOD's medical surveillance capability and performance during the Gulf War and Operation Joint Endeavor and the challenges DOD faces in implementing a reliable medical surveillance system. Investigations into the unexplained illnesses of Gulf War veterans uncovered many deficiencies in DOD's ability to collect, maintain, and transfer accurate data describing the movement of troops, potential exposures to health risks, and medical incidents during deployment. DOD improved its medical surveillance system under Operation Joint Endeavor, which provided useful information to military commanders and medical personnel. However, we and others reported a number of problems with this system. For example, information related to service members' health and deployment status—data critical to an effective medical surveillance system—was incomplete or inaccurate. DOD's numerous databases, including those that capture health information, are currently not linked, which further challenges the department's efforts to establish a single, comprehensive electronic system to document, archive, and access medical surveillance data.

DOD has several initiatives under way to improve the reliability of deployment information and to enhance its information technology capabilities, as we and others have recommended, though some initiatives are several years away from full implementation. Nonetheless, these efforts reflect a commitment by DOD to establish a comprehensive medical surveillance system. The ability of VA to fulfill its role in serving veterans and providing backup to DOD in times of war will be enhanced as DOD increases its medical surveillance capability.

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## Background

An effective military medical surveillance system needs to collect reliable information on (1) the health care provided to service members before, during, and after deployment, (2) where and when service members were deployed, (3) environmental and occupational health threats or exposures during deployment (in theater) and appropriate protective and counter measures, and (4) baseline health status and subsequent health changes.

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<sup>5</sup>The Secretary of the Army is responsible for medical surveillance for DOD deployments, consistent with DOD's medical surveillance policy.

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This information is needed to monitor the overall health condition of deployed troops, inform them of potential health risks, as well as maintain and improve the health of service members and veterans.

In times of conflict, a military medical surveillance system is particularly critical to ensure the deployment of a fit and healthy force and to prevent disease and injuries from degrading force capabilities. DOD needs reliable medical surveillance data to determine who is fit for deployment; to prepare service members for deployment, including providing vaccinations to protect against possible exposure to environmental and biological threats; and to treat physical and psychological conditions that resulted from deployment. DOD also uses this information to develop educational measures for service members and medical personnel to ensure that service members receive appropriate care.

Reliable medical surveillance information is also critical for VA to carry out its missions. In addition to VA's better known missions—to provide health care and benefits to veterans and medical research and education—VA has a fourth mission: to provide medical backup to DOD in times of war and civilian health care backup in the event of disasters producing mass casualties. As such, VA needs reliable medical surveillance data from DOD to treat casualties of military conflicts, provide health care to veterans who have left active duty, assist in conducting research should troops be exposed to environmental or occupational hazards, and identify service-connected disabilities, and adjudicate veterans' disability claims.

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**Medical  
Recordkeeping and  
Surveillance During  
the Gulf War Was  
Lacking**

Investigations into the unexplained illnesses of service members and veterans who had been deployed to the Gulf uncovered the need for DOD to implement an effective medical surveillance system to obtain comprehensive medical data on deployed service members, including Reservists and National Guardsmen. Epidemiological and health outcome studies to determine the causes of these illnesses have been hampered due to incomplete baseline health data on Gulf War veterans, their potential exposure to environmental health hazards, and specific health data on care provided before, during, and after deployment. The Presidential Advisory Committee on Gulf War Veterans' Illnesses' and IOM's 1996 investigations into the causes of illnesses experienced by Gulf War

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veterans confirmed the need for more effective medical surveillance capabilities.<sup>6</sup>

The National Science and Technology Council, as tasked by the Presidential Advisory Committee, also assessed the medical surveillance system for deployed service members. In 1998, the council reported that inaccurate recordkeeping made it extremely difficult to get a clear picture of what risk factors might be responsible for Gulf War illnesses.<sup>7</sup> It also reported that without reliable deployment and health assessment information, it was difficult to ensure that veterans' service-related benefits claims were adjudicated appropriately. The council concluded that the Gulf War exposed many deficiencies in the ability to collect, maintain, and transfer accurate data describing the movement of troops, potential exposures to health risks, and medical incidents in theater. The council reported that the government's recordkeeping capabilities were not designed to track troop and asset movements to the degree needed to determine who might have been exposed to any given environmental or wartime health hazard. The council also reported major deficiencies in health risk communications, including not adequately informing service members of the risks associated with countermeasures such as vaccines. Without this information, service members may not recognize potential side effects of these countermeasures and promptly take precautionary actions, including seeking medical care.

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<sup>6</sup> *Health Consequences of Service During the Persian Gulf War: Recommendations for Research and Information Systems*, Institute of Medicine, Medical Follow-up Agency (Washington, D.C.: National Academy Press, 1996); *Presidential Advisory Committee on Gulf War Veterans' Illnesses: Interim Report* (Washington, D.C.: U.S. Government Printing Office, Feb. 1996); *Presidential Advisory Committee on Gulf War Veterans' Illnesses: Final Report* (Washington, D.C.: U.S. Government Printing Office, Dec. 1996).

<sup>7</sup> *National Science and Technology Council Presidential Review Directive 5* (Washington, D.C.: Executive Office of the President, Office of Science and Technology Policy, Aug. 1996).

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### Medical Surveillance Under Operation Joint Endeavor Improved but Was Not Comprehensive

In response to these reports, DOD strengthened its medical surveillance system under Operation Joint Endeavor when service members were deployed to Bosnia-Herzegovina, Croatia, and Hungary. In addition to implementing departmentwide medical surveillance policies, DOD developed specific medical surveillance programs to improve monitoring and tracking environmental and biomedical threats in theater. While these efforts represented important steps, a number of deficiencies remained.

On the positive side, the Assistant Secretary of Defense (Health Affairs) issued a health surveillance policy for troops deploying to Bosnia.<sup>8</sup> This guidance stressed the need to (1) identify health threats in theater, (2) routinely and uniformly collect and analyze information relevant to troop health, and (3) disseminate this information in a timely manner. DOD required medical units to develop weekly reports on the incidence rates of major categories of diseases and injuries during all deployments. Data from these reports showed theaterwide illness and injury trends so that preventive measures could be identified and forwarded to the theater medical command regarding abnormal trends or actions that should be taken.

DOD also established the U.S. Army Center for Health Promotion and Preventive Medicine—a major enhancement to DOD's ability to perform environmental monitoring and tracking. For example, the center operates and maintains a repository of service members' serum samples for medical surveillance and a system to integrate, analyze, and report data from multiple sources relevant to the health and readiness of military personnel. This capability was augmented with the establishment of the 520th Theater Army Medical Laboratory—a deployable public health laboratory for providing environmental sampling and analysis in theater. The sampling results can be used to identify specific preventive measures and safeguards to be taken to protect troops from harmful exposures and to develop procedures to treat anyone exposed to health hazards. During Operation Joint Endeavor, this laboratory was used in Tuzla, Bosnia, where most of the U.S. forces were located, to conduct air, water, soil, and other environmental monitoring.

Despite the department's progress, we and others have reported on DOD's implementation difficulties during Operation Joint Endeavor and the

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<sup>8</sup>Health Affairs Policy 96-019 (DOD Assistant Secretary of Defense Memorandum, Jan. 4, 1996).



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shortcomings in DOD's ability to maintain reliable health information on service members. Knowledge of who is deployed and their whereabouts is critical for identifying individuals who may have been exposed to health hazards while deployed. However, in May 1997, we reported that the inaccurate information on who was deployed and where and when they were deployed—a problem during the Gulf War—continued to be a concern during Operation Joint Endeavor.<sup>9</sup> For example, we found that the Defense Manpower Data Center (DMDC) database—where military services are required to report deployment information—did not include records for at least 200 Navy service members who were deployed. Conversely, the DMDC database included Air Force personnel who were never actually deployed. In addition, we reported that DOD had not developed a system for tracking the movement of service members within theater. IOM also reported that the locations of service members during the deployments were still not systematically documented or archived for future use.<sup>10</sup>

We also reported in May 1997 that for the more than 600 Army personnel whose medical records we reviewed, DOD's centralized database for postdeployment medical assessments did not capture 12 percent of those assessments conducted in theater and 52 percent of those conducted after returning home.<sup>11</sup> These data are needed by epidemiologists and other researchers to assess at an aggregate level the changes that have occurred between service members' pre- and postdeployment health assessments. Further, many service members' medical records did not include complete information on in-theater postdeployment medical assessments that had been conducted. The Army's European Surgeon General attributed missing in-theater health information to DOD's policy of having service members hand carry paper assessment forms from the theater to their home units,

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<sup>9</sup> *Defense Health Care: Medical Surveillance Improved Since Gulf War, but Mixed Results in Bosnia* (GAO/NSIAD-97-136, May 13, 1997).

<sup>10</sup> See *Institute of Medicine, Protecting Those Who Serve: Strategies to Protect the Health of Deployed U.S. Forces* (Washington, D.C., National Academy Press, 2000).

<sup>11</sup> In many cases, we found that these assessments were not conducted in a timely manner or were not conducted at all. For example, of the 618 personnel whose records we reviewed, 24 percent did not receive in-theater postdeployment medical assessments and 21 percent did not receive home station postdeployment medical assessments. Of those who did receive home station postdeployment medical assessments, the assessments were on average conducted nearly 100 days after they left theater—instead of within 30 days, as DOD requires.

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where their permanent medical records were maintained. The assessments were frequently lost en route.

We have also reported that not all medical encounters in theater were being recorded in individual records. Our 1997 report identified that this problem was particularly common for immunizations given in theater. Detailed data on service members' vaccine history are vital for scheduling the regimen of vaccinations and boosters and for tracking individuals who received vaccinations from a specific lot in the event health concerns about the vaccine lot emerge. We found that almost one-fourth of the service members' medical records that we reviewed did not document the fact that they had received a vaccine for tick-borne encephalitis. In addition, in its 2000 report, IOM cited limited progress in medical recordkeeping for deployed active duty and reserve forces and emphasized the need for records of immunizations to be included in individual medical records.

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### Current Policies and Programs Not Fully Implemented

Responding to our and others' recommendations to improve information on service members' deployments, in-theater medical encounters, and immunizations, DOD has continued to revise and expand its policies relating to medical surveillance, and the system continues to evolve. In addition, in 2000, DOD released its Force Health Protection plan, which presents its vision for protecting deployed forces.<sup>12</sup> This vision emphasizes force fitness and health preparedness and improving the monitoring and surveillance of health threats in military operations. However, IOM criticized DOD's progress in implementing its medical surveillance program and the failure to implement several recommendations that IOM had made. In addition, IOM raised concerns about DOD's ability to achieve the vision outlined in the Force Health Protection plan. We have also reported that some of DOD's programs designed to improve medical surveillance have not been fully implemented.

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### Recent IOM Report Concludes Slow Progress by DOD in Implementing Recommendations

IOM's 2000 report presented the results of its assessment of DOD's progress in implementing recommendations for improving medical surveillance made by IOM and several others. IOM stated that, although DOD generally concurred with the findings of these groups, DOD had made few concrete changes at the field level. For example, medical

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<sup>12</sup>Joint Staff, Medical Readiness Division, *Force Health Protection* (2000).

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encounters in theater were still not always recorded in individuals' medical records, and the locations of service members during deployments were still not systematically documented or archived for future use. In addition, environmental and medical hazards were not yet well integrated in the information provided to commanders.

The IOM report notes that a major reason for this lack of progress is no single authority within DOD has been assigned responsibility for the implementation of the recommendations and plans. IOM said that because of the complexity of the tasks involved and the overlapping areas of responsibility involved, the single authority must rest with the Secretary of Defense.

In its report, IOM describes six strategies that in its view demand further emphasis and require greater efforts by DOD:

- Use a systematic process to prospectively evaluate non-battle-related risks associated with the activities and settings of deployments.
- Collect and manage environmental data and personnel location, biological samples, and activity data to facilitate analysis of deployment exposures and to support clinical care and public health activities.
- Develop the risk assessment, risk management, and risk communications skills of military leaders at all levels.
- Accelerate implementation of a health surveillance system that completely spans an individual's time in service.
- Implement strategies to address medically unexplained symptoms in populations that have deployed.
- Implement a joint computerized patient record and other automated recordkeeping that meets the information needs of those involved with individual care and military public health.

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**Our Work Also Indicates Some DOD Programs for Improving Medical Surveillance Are Not Fully Implemented**

DOD guidance established requirements for recording and tracking vaccinations and automating medical records for archiving and recalling medical encounters. While our work indicates that DOD has made some progress in improving its immunization information, the department faces numerous challenges in implementing an automated medical record.

In October 1999, we reported that DOD's Vaccine Adverse Event Reporting System, which relies on medical personnel or service members to provide

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needed vaccine data, may not have included information on adverse reactions because DOD did not adequately inform personnel on how to provide this information.<sup>13</sup>

Also, in April 2000, we testified that vaccination data were not consistently recorded in paper records and in a central database, as DOD requires.<sup>14</sup> For example, when comparing records from the database with paper records at four military installations, we found that information on the number of vaccinations given to service members, the dates of the vaccinations, and the vaccine lot numbers were inconsistent at all four installations. At one installation, the database and records did not agree 78 to 92 percent of the time. DOD has begun to make progress in implementing our recommendations, including ensuring timely and accurate data in its immunization tracking system.

The Gulf War revealed the need to have information technology play a bigger role in medical surveillance to ensure that the information is readily accessible to DOD and VA. In August 1997, DOD established requirements that called for the use of innovative technology, such as an automated medical record device that can document inpatient and outpatient encounters in all settings and that can archive the information for local recall and format it for an injury, illness, and exposure surveillance database.<sup>15</sup> Also, in 1997, the President, responding to deficiencies in DOD's and VA's data capabilities for handling service members' health information, called for the two agencies to start developing a comprehensive, lifelong medical record for each service member. As we reported in April 2001, DOD's and VA's numerous databases and electronic systems for capturing mission-critical data, including health information, are not linked and information cannot be readily shared.<sup>16</sup>

DOD has several initiatives under way to link many of its information systems—some with VA. For example, in an effort to create a

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<sup>13</sup> *Medical Readiness: DOD Faces Challenges in Implementing Its Anthrax Vaccine Immunization Program* (GAO/NSIAD-00-36, Oct. 22, 1999).

<sup>14</sup> *Medical Readiness: DOD Continues to Face Challenges in Implementing Its Anthrax Vaccine Immunization Program* (GAO/T-NSIAD-00-157, Apr. 13, 2000).

<sup>15</sup> DOD Directive 6490.2, "Joint Medical Surveillance" (Aug. 30, 1997).

<sup>16</sup> *Computer-Based Patient Records: Better Planning and Oversight by VA, DOD, and IHS Would Enhance Health Data Sharing* (GAO-01-459, Apr. 30, 2001).

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comprehensive, lifelong medical record for service members and veterans and to allow health care professionals to share clinical information, DOD and VA, along with the Indian Health Service (IHS),<sup>17</sup> initiated the Government Computer-Based Patient Record (GCPR) project in 1998. GCPR is seen as yielding a number of potential benefits, including improved research and quality of care, and clinical and administrative efficiencies. However, our April 2001 report describes several factors—including planning weaknesses, competing priorities, and inadequate accountability—that made it unlikely that DOD and VA would accomplish GCPR or realize its benefits in the near future. To strengthen the management and oversight of GCPR, we made several recommendations, including designating a lead entity with a clear line of authority for the project and creating comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data.

For the near term, DOD and VA have decided to reconsider their approach to GCPR and focus on allowing VA to view DOD health data. However, under the interim effort, physicians at military medical facilities will not be able to view health information from other facilities or from VA—now a potentially critical information source given VA's fourth mission to provide medical backup to the military health system in times of national emergency and war.

In October 2001, we met with officials from the Defense Health Program and the Army Surgeon General's Office who indicated that the department is working on issues we have reported on in the past, including the need to improve the reliability of deployment information and the need to integrate disparate health information systems. Specifically, these officials informed us that DOD is developing a more accurate roster of deployed service members and enhancing its information technology capabilities. For example, DOD's Theater Medical Information Program (TMIP) is intended to capture medical information on deployed personnel and link it with medical information captured in the department's new medical information system, now being field tested.<sup>18</sup> Developmental testing for

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<sup>17</sup>IHS was included in the effort because of its population-based research expertise and its long-standing relationship with VA.

<sup>18</sup>Composite Health Care System II (CHCS II) is expected to capture information on immunizations; allergies; outpatient encounters, such as diagnostic and treatment codes; patient hospital admission and discharge; patient medications; laboratory results; and radiology. CHCS II is expected to support best business practices, medical surveillance, and clinical research.

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TMIP has begun and field testing is expected to begin in spring 2002, with deployment expected in 2003. A component system of TMIP—Transportation Command Regulating and Command and Control Evacuation System—is also under development and aims to allow casualty tracking and provide in-transit visibility of casualties during wartime and peacetime. Also under development is the Global Expeditionary Medical System, which DOD characterizes as a stepping stone to an integrated biohazard surveillance and detection system.

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**Concluding  
Observations**

Clearly, the need for comprehensive health information on service members and veterans is very great, and much more needs to be done. However, it is also a very difficult task because of uncertainties about what conditions may exist in a deployed setting, such as potential military conflicts, environmental hazards, and frequency of troop movements. While progress is being made, DOD will need to continue to make a concerted effort to resolve the remaining deficiencies in its surveillance system. Until such a time that some of the deficiencies are overcome, VA's ability to perform its missions will be affected.

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**Contact and  
Acknowledgments**

For further information, please contact Cynthia A. Bascetta at (202) 512-7101. Individuals making key contributions to this testimony included Ann Calvaresi Barr, Karen Sloan, and Keith Steck.

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## Related GAO Products

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*Computer-Based Patient Records: Better Planning and Oversight by VA, DOD, and IHS Would Enhance Health Data Sharing* (GAO-01-459, Apr. 30, 2001).

*Medical Readiness: DOD Continues To Face Challenges in Implementing Its Anthrax Vaccine Immunization Program* (GAO/T-NSIAD-00-157, Apr. 13, 2000).

*Medical Readiness: DOD Faces Challenges in Implementing Its Anthrax Vaccine Immunization Program* (GAO/NSIAD-00-36, Oct. 22, 1999).

*Chemical and Biological Defense: Observations on DOD's Plans to Protect U.S. Forces* (GAO/T-NSIAD-98-83, Mar. 17, 1998).

*Gulf War Veterans: Incidence of Tumors Cannot Be Reliably Determined From Available Data* (GAO/NSIAD-98-89, Mar. 3, 1998).

*Gulf War Illnesses: Federal Research Strategy Needs Reexamination* (GAO-T-NSIAD-98-104, Feb. 24, 1998).

*Gulf War Illnesses: Research, Clinical Monitoring, and Medical Surveillance* (GAO/T-NSIAD-98-88, Feb. 5, 1998).

*Defense Health Care: Medical Surveillance Improved Since Gulf War, but Mixed Results in Bosnia* (GAO/NSIAD-97-136, May 13, 1997).

(290166)

**STATEMENT OF  
STEVE SMITHSON  
ASSISTANT DIRECTOR, VETERANS' AFFAIRS  
AND  
REHABILITATION COMMISSION  
THE AMERICAN LEGION  
SUBMITTED TO THE  
HOUSE VETERANS' AFFAIRS COMMITTEE  
HEALTH SUBCOMMITTEE  
ON  
LESSONS LEARNED FROM THE PERSIAN GULF WAR**

**January 24, 2002**

Mr. Chairman and Members of the Subcommittee:

The American Legion appreciates the opportunity to provide testimony on issues of operational and medical readiness in the active duty force and their relationship to the health status of the veterans' population. The American Legion was the first advocate of ill Persian Gulf veterans to approach Congress with documented concerns over their plight for health care and, more importantly, answers to the question: "Why am I sick?"

It did not take Congress or the American people long to learn of the multitude of honest mistakes made before, during, and after the deployment of service men and women to the Persian Gulf. The American Legion's first concern was care and treatment of the ill Persian Gulf veterans and their family members. The second concern was identifying the possible causes of the reported symptoms. The third concern was identifying the failures of improper activities that seriously complicated the process of addressing the health care issues. Finally, to make sure the same mistakes were not repeated in future deployments or conflicts.

William Feather said, "Mistakes occur when a man is over-worked or over-confident." Many of the mistakes discussed today probably fall into one of these two categories. However, Winston Churchill wisely advised, "If you simply take up the attitude of defending a mistake, there will be no hope of improvement." The days of finger pointing and placing blame are over. The focus must shift toward the men and women on active-duty today, as well as those future service members.

The most grievous error was improperly addressing the health care complaints of returning veterans. The fact that these veterans were complaining of symptoms developed overseas or immediately upon return should have been taken much more seriously by tending health care professionals, especially symptoms that would have made a service member undeployable. The establishment of a registry of health care symptoms of returning veterans should be a standard operating procedure.



Another major problem was the failure to properly document medical treatment before, during, and after the deployment of service members. Numerous examples were identified of lost or destroyed medical records of active-duty and reservists. Shot records were improperly documented omitting certain inoculations administered in the Persian Gulf. Likewise, medications prescribed were not properly documented to identify which service members received certain medications.

Improper administration of certain vaccines and medications further complicated the process. Service members were not provided information concerning vaccines and medications given them. Some medications were distributed with no written instructions concerning dosage or the conditions under which the medication should be taken. Little information was provided concerning expected side effects or instructions to immediately report unexpected side effects to medical personnel.

Clearly, The American Legion continues to question the ability of American service personnel to operate and survive in a nuclear, biological, or chemical environment. The ability to properly detect the presence of NBC agents in the area of operation remains a grave concern. Reports of thousands of alarms from NBC equipment were all identified as false alarms, yet the credible presence of chemical agents is now well documented.

Almost 11 years have passed since the start of the Persian Gulf War. During that time there have been many attempts to answer the multitude of unresolved questions surrounding the medically unexplained multiple symptom illnesses reported by thousands of Gulf War veterans following the 1991 war. Research and other progress has been impeded largely due to errors that occurred prior to, during and after the massive deployment that involved almost 700,000 personnel.

Since then, American service members have continued their efforts in the Persian Gulf and have deployed globally to other turbulent theaters. Fortunately, many of the lessons learned have improved the pre and post deployments for thousands of service men and women. This has greatly enhanced the morale and welfare of not only service members, but their families and loved ones as well.

Prior to the Gulf War deployment, troops were not systematically given comprehensive pre-deployment health screenings, nor were they properly briefed on the potential deployment hazards, such as fall out from depleted uranium munitions that they might encounter on the battlefield or in the theater. Additionally, record keeping was very poor, vaccines were not administered in a consistent manner and vaccination records were often unclear. Medications were distributed with little or no documentation or dosage instructions, to include possible side effects. Physical evaluations (pre and post deployment) were not comprehensive and information regarding troop movements/locations and possible exposures was severely lacking. The lack of such baseline data and other information is commonly recognized as a major limitation in the evaluation and understanding of potential causes of Gulf War veterans' illnesses.

The American Legion is very familiar with the plight of our nation's ill Gulf War veterans. The mistakes made during and after the Operation Desert Shield/Storm deployment have resulted in an undesirable legacy that has lasted much longer than the deployment itself. Initially, upon returning home, Gulf War veterans, complaining of unexplainable multi-symptom illnesses were met with indifference from Department of Veterans' Affairs (VA) and Department of Defense (DoD) officials. Doctors did not know how to treat these veterans, often labeling them as malingerers or categorizing their physical complaints as psychosomatic.

Additionally, the VA compensation system was not set up to deal with the unique situation these ill Gulf War veterans presented. Often times, the symptom clusters exhibited by Gulf War veterans did not fit known clinical diagnoses. Without a diagnosis, a veteran was precluded from receiving VA compensation for a service-related disability. The American Legion and other VSOs urged Congress to approve legislation (PL 103-446) allowing Gulf War veterans suffering from undiagnosed or ill defined conditions to receive VA disability compensation. When VA's regulations implementing the law were narrowly construed, effectively precluding the majority of ill Gulf War veterans from compensation under this law, The American Legion once again called on Congress to correct the problem.

The American Legion is extremely pleased with the provisions of PL 107-103, signed into law by the president on December 27, 2001, that clarify the definition of "undiagnosed illness" for VA purposes under the law, recognizing the original intent of Congress when it passed the law in 1994. We are also pleased that VA Secretary Anthony Principi has agreed to explore VA's options for compensating Gulf War veterans who subsequently develop amyotrophic lateral sclerosis (ALS). Preliminary findings of a joint VA-DoD study revealed that deployed Gulf War veterans are nearly twice as likely as their non-deployed counterparts to develop ALS.

The American Legion welcomes this Subcommittee's investigation as to whether the lessons learned during the Gulf War are being systematically applied by DoD and VA in the prosecution of the current war on terrorism. The subject of "lessons learned" from the Gulf War experience has been widely studied. There have been numerous reports and recommendations from the Institute of Medicine (IOM) as well as independent panels and committees outlining methods of improvement. PL 105-85, directed, DoD to take specific actions to improve medical tracking for personnel deployed overseas in contingency or combat operations, outlining a policy for pre and post deployment health assessments and blood samples. The conduct of a thorough examination (pre and post deployment), including the drawing of blood samples was specifically identified in the law. Such action is crucial for the accurate recording of a service member's health prior to deployment and in documenting any changes in their health during deployment.

Improved health surveillance is in no way a panacea for troop deployment health concerns. There must be open and honest communication regarding environmental hazards and other agents that ground personnel may be exposed to during deployment. History is ripe with examples of DoD's failure to be forthcoming with timely and

accurate information pertaining to toxic exposures, such as Agent Orange in Vietnam, radiation exposure from Cold War nuclear detonation testing as well as biological warfare defense testing (Operation Shipboard Hazard and Defense--SHAD) in the 1960s. Unfortunately, the Gulf War was no different. It took over five years for the Pentagon to admit that U.S. troops were exposed to low levels of nerve agent following the destruction of an Iraqi munitions depot in Southern Iraq in March 1991. Strict monitoring and congressional oversight will be needed to ensure that this type of pattern is not repeated in today's war on terrorism.

One positive aspect that can be drawn from the mistakes made before, during and after the Gulf War is the consistent application of the lessons learned from these errors. Ensuring that both measures recommended and those currently in place are properly and consistently implemented during the current war on terrorism will not be an easy task.

Mr. Chairman, that completes my testimony. Again, I thank you for allowing The American Legion to provide comments on this important issue. The American Legion looks forward to working with the members of this Subcommittee to improve the operational and medical readiness needed to ensure the health of America's veterans past, present and future.

TESTIMONY of RICHARD JONES, AMVETS NATIONAL LEGISLATIVE DIRECTOR

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

On behalf of AMVETS National Commander Joseph W. Lipowski, I am pleased to present AMVETS views on issues of medical readiness in the active duty force and the relationship to the health status of the veteran population.

As you know, AMVETS -- a leader in preserving the freedoms secured by America's Armed Forces -- provides, not only support for veterans and the active military in procuring receipt of their earned entitlement, but also community services that enhance the quality of life for this nation's citizens.

There can be truly few more forward-looking activities than providing health care support to the brave men and women of our armed services. It is our view that the concern about protecting the health of our military members is about the best and most concrete way to address not only preparedness for future deployments but the long-term health of those who served, as well.

AMVETS believes we can and should do more to ensure our commitment to our troops. Although we have come a long way toward an understanding of the critical importance of general health status of deploying and redeploying military personnel, we can and should do more.

The challenge is worth the effort. The advantages are apparent. Our past experience in the Persian Gulf War identifies the need for increased coordination between the DoD's health care system and the VA's. Despite different missions, our overall vision on this matter should be clear. Certainly, an intricate part of our strategy should include cooperation, between DoD and VA, to ensure quality health care for the men and women who serve our country and those who have served us so honorably in the past.

AMVETS believes that there are compelling reasons to move forward, and we remain optimistic that a lot can be done. Despite restrictions on the movement of personally identified medical information, VA and DoD must attain strong agreements that allow an individual's healthcare history and documentation to move from one place to another without interference from or abridgment of privacy issues. VA and DoD must sort out the means to provide an

individual's specific laboratory, radiology, hospital discharge, pharmaceutical records, and related materials for those who are approaching the VA for a disability or benefit determination.

AMVETS is convinced that this hearing is essential to help muster the energy to move us to a point we need to be. The status quo is a very powerful force to those who have no incentive or reason to change. Congressional attention can assist in making progress in this area.

We are fully committed to ensuring that the quality of veterans health care remains exceptionally high. Part of the answer to our future healthcare efforts is the development of a current, intense focus on preserving the health of the force during deployments and at home station. Ensuring the service members' health and safety should be a recognized high priority.

With ongoing operations in Afghanistan and the Balkins, we should ensure that the services maintain a clear focus on improved medical record-keeping, disease and non-battle injury surveillance, pre- and post-deployment health assessments, environmental surveillance and general health treatments.

One of the keys to preclude Gulf War illness-types of experiences in the future is to remain alert to our troops' health and safety while performing missions under potentially hazardous environmental, chemical, and biological warfare conditions.

Integral to the success of post-deployment health is the development of an evidence-based evaluation program focused on assisting healthcare providers in screening, evaluating, and treating service members with deployment-related health concerns. Part of this step is an overall assessment, which helps to identify trends in the health of deployed service members and targets areas for improvements.

In July 2001 testimony, the acting secretary of defense for health affairs, Rear Admiral J. Jarrett Clinton, told members of the House Armed Services Committee that the Department of Defense was moving forward and expanding efforts to capture and analyze health and readiness information about service members, especially during deployment. At that time, the admiral said that the DoD's Theater Medical Information Program coupled with the Composite Health Care System (also referred to as the military computer-based patient record) "...will form the longitudinal view of health information that captures all health encounters and exposures for

every service member.” His testimony further stated that computer-based records would allow VA to access a veteran’s health information for improved quality care.

AMVETS fully supports the role of Congress and this Subcommittee to insist that DoD intensify its efforts to protect the health of deployed troops. Holding DoD accountable for meeting targets that ensure progress along these lines will keep operational preparedness on track and in the right direction. Your oversight responsibilities will also help provide for an improved response to the health challenges of our men and women in the field.

Mr. Chairman, AMVETS would also ask that you and members of the subcommittee continue to help lead in the effort to fund fully the implementation of the computerized patient record (CPR). We remain hopeful that the Navy’s surgeon general, Vice Admiral Richard A. Nelson, is correct when he stated before the House Armed Services Committee in July, 2001, that CPR will give health providers instant access to the healthcare history of each patient and provide a veteran’s “...comprehensive life-long medical record of illnesses, hazardous exposures, injuries suffered, and the care and immunizations received.”

AMVETS is pleased that your subcommittee is calling attention to force health protection and its critical relationship to the future health status of veterans. We trust you will continue to push beyond the documentation of that person’s life-long medical records to the documentation of an individual’s location during deployment and medical encounters during service. The seriousness of these issues has been raised a number of times since Operations Desert Shield and Desert Storm with little progress toward meeting the challenge.

Again, thank you for the opportunity to testify on this important issue, and thank you, as well, for your outstanding support of veterans and their families. We believe that the price we pay is not too great for the value received.

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*STATEMENT OF  
JOY J. ILEM  
ASSISTANT NATIONAL LEGISLATIVE DIRECTOR  
OF THE  
DISABLED AMERICAN VETERANS  
BEFORE THE  
HOUSE VETERANS' AFFAIRS COMMITTEE  
SUBCOMMITTEE ON HEALTH  
January 24, 2002*

Mr. Chairman and Members of the Subcommittee:

I am pleased to present the views of the Disabled American Veterans (DAV) regarding the operational and medical readiness in the active duty force and their relationships to the health status of the veteran population. The health and well-being of the men and women who have put themselves in harm's way in defense of our Nation continues to be one of our foremost concerns and is of great importance to the DAV's more than one million members and their families.

During Operations Desert Shield and Desert Storm, the United States deployed 697,000 military personnel to the Persian Gulf. Serious health concerns related to service in the Persian Gulf were reported as Gulf War veterans began to return home in 1991 with complaints of vexing symptomatology and the development of unexplained illnesses. More than 100,000 troops who served in the Gulf War say they suffer from a range of maladies including chronic muscle and joint pain, fatigue, headaches, memory loss, balance problems, and sleep disturbances. The complexity and controversy surrounding Gulf War illnesses immediately became apparent as the VA attempted to medically treat and compensate veterans who had become ill following their military service in the Gulf War. Controversy over this issue still exists today, more than ten years later, as scientists and medical researchers continue to search for answers and contemplate the various health risk factors associated with service in the Gulf War and reported illnesses affecting many veterans who served there.

The Department of Defense (DoD) was heavily criticized for failing to provide explanations about Gulf War veterans' health concerns or respond in a prudent manner. Faith in the government's commitment to ensuring the safety of servicemembers' and veterans' health and providing appropriate care was seriously eroded. After intense pressure, DoD admitted its shortcomings and failure to properly communicate with troops during the Gulf War about health concerns relating to smoke from oil well fires, required vaccinations and medications, exposure to depleted uranium, and other chemical hazards.

The Office of the Special Assistant for Gulf War Illnesses (OSAGWI) was established on November 12, 1996, to coordinate all aspects of DoD programs related to Gulf War illnesses. The organization was developed around a three-part mission statement which emphasized DoD's commitment to service personnel and veterans who served in the Gulf, and focused on operational impacts on health and future force protection. It included a Lessons Learned Implementation Directorate with a commitment to make whatever changes were necessary in equipment, policy and procedures to minimize and any future problems from servicemembers' exposure to chemical and/or biological agents, and environmental hazards. DoD touted that it started to listen to veterans, established an open door policy, and a formal method to investigate Gulf War incidents.

Last year, a new Office of the Special Assistant to the Secretary of Defense for Gulf War Illnesses, Medical Readiness and Military Deployments (OSAGWI-MRMD) was formed to continue the support for appropriate health care for sick Gulf War veterans while promoting changes in existing military doctrine, policy and procedures that will minimize any future hazardous exposures during deployments. DoD recognized it must properly train military personnel in the use of chemical detection equipment, effectively communicate safety precautions for depleted uranium, the use of pesticides, and other chemical hazards future troops may encounter on the modern battlefield.

In November 1998, President Clinton directed the establishment of the Military and Veterans Health Coordinating Board (MVHCB), an interagency body including the Secretaries of Defense, Health and Human Services, and Veterans Affairs, to ensure coordination among the respective agencies with respect to clinical, research, and health risk communication issues related to the health of military members, veterans, and their families during and after future deployments. The MVHCB is responsible for making recommendations to minimize adverse health consequences of deployment and to coordinate an interagency information management (IM), and information technology (IT) task force, to ensure that all IM/IT requirements including record keeping are addressed by the agencies. A Deployment Health Working Group (DHWG) was designed to determine interagency priorities for the assessment and prevention of deployment and post-deployment health issues. Its recommendations concern preventative countermeasures, pre- and post-deployment health assessments, medical surveillance during deployments, combat stress control, and individual environmental exposure assessments. The group also provides recommendations to the various agencies concerning research, clinical findings, prevention, diagnosis, and clinical care. Another component of the group is to help ensure lessons learned from previous military combat operations are translated into effective preparation for future missions.



Military officials claim they have a new mind set concerning the long-term health of their troops and have indicated that they are taking measures to improve medical monitoring of personnel sent overseas to fight the war on terrorism, in an attempt to avoid lingering health problems like those experienced by Gulf War veterans. Officials claim they are keeping careful records for troops and requiring servicemembers to complete a simple medical screening before and after they are deployed. One report indicated that the Armed Forces are beginning to convert medical records for each servicemember to an electronic database. The report also noted that the Pentagon has started environmental monitoring for areas where it sends its troops. Certainly, we hope these measures have been carried out. However, only time will tell if the appropriate agencies have fully addressed the lessons learned in the Gulf War and if efforts have been effectively coordinated to protect the health of our troops.

The DAV believes military personnel should have complete medical examinations prior to deployment and after completion of an assignment to include collection of blood samples. This would allow clinicians and researchers to ascertain changes in health status in individuals and groups of servicemembers if health concerns become apparent following a particular deployment. It is also important that accurate record keeping during deployment is accomplished and accessible, especially if a servicemember becomes ill during the deployment. Many sick Gulf War veterans were unable to access field health treatment records once they returned home. DoD reported that many veterans could not obtain records because they were filed by the name of the hospital that retired the records and veterans could not furnish the name of the field hospital to which they were admitted. This documentation can be crucial to a veteran's medical treatment and application for VA disability compensation benefits.

It is essential that all appropriate agencies work together to integrate deployment health-related lessons learned with regard to future doctrine and policy to assure that servicemembers and their families understand the possible risks and how they can best protect themselves and their families' health and get the assistance and care they need as they transition into veteran status. The appropriate federal agencies must share responsibility for force health protection before, during, and after deployments. Without coordination, veterans will likely experience issues similar to those of the Gulf War. DoD is obligated to provide accurate information about the health risks servicemembers face. The Department needs to be proactive rather than reactive concerning risks servicemembers may encounter during future deployments from the modern battlefield and environmental conditions. Likewise, the Veterans Health Administration must focus its scientific research, medical treatment, and outreach on veterans who become ill as a result of their military service. Disabled veterans must have access to appropriate

treatment regimes so they can try to regain their health and well-being following military service.

We urge the Subcommittee to closely monitor the federal agencies responsible for coordinating force health protection. We sincerely appreciate the opportunity to present our views on this issue and its relationship to the health status of the veteran population.

**TESTIMONY**

**U.S. House of Representatives**

**Committee on Veterans Affairs**

**Subcommittee on Health**

**Hearing on**

**Lesson Learned by Deployed Veterans as they utilize  
the Department of Veterans Affairs and  
Department of Defense - Offices on Deployment Health  
Services**

**January 24, 2002**

**Cannon House Office Building**

**Speaker Venus-val Hammack  
Vietnam and Gulf War Era combat Veteran**

**Deployment Illness Advocate for**

**National Association for Black Veterans  
Persian Gulf Era Veterans of Massachusetts  
Womens Army Corp Association**

Mr. Chairman and Members of the subcommittee: I am very grateful for the opportunity to testify today. I plan to provide a brief overview of some the topics of concern members of the grass roots organizations, of which to whom I belong believe should be discussed.

#### LESSONS LEARNED

Centers for the Study of War-Related Illnesses (**SWRI**) when created from mandates in the 105<sup>th</sup> congress and the announcement of their location was made public on 16May 2001; as of this time SWRI clinic have NOT solicited in put from veterans to this very day. Where is the accountability when a mission is not up and running for a prolong period of time? The are many sick veterans who need to be evaluated SWRI especially since the VA Gulf War Referral Clinics have been de-activated and closing their door around the country.

[2] Where's the Beef - or Guidelines.... have lessons been learned?

I went to 6 VAMC on the East Coast. I was told medical staff was using " A Guide to Gulf War Veterans' Health: A Comprehensive Clinical Evaluation of 20,00 Persian Gulf War Veterans" as a review guide before examining gulf war veterans and later deployed veterans.

Yet with the facility's **Gulf War coordinator** at my side, we could only located **2 copies** of this document per hospital. One in the facilities' Director's Office and the ONE copy in the VAMC's medical library. **Too few** to share among the all care providing staff.

[3] Lesson Learned the secret is out on how VA Educational System handled the brief of the staff on this book. The first printing in 1995 had 134 pages, the next printing had 79 pages and the latest printing is 49 pages. Techniques use to brief medical staff for acquiring Continue Education points was the following:

the individual would brief each class using a 25 page Summary of the same title "A Guide to Gulf War Veterans' Health: A Comprehensive Clinical Evaluation of 20,00 Persian Gulf War Veterans". At the end of class a questionnaire of 20 questions was use as feedback mechanism and testing tool for facts acquired in this class. Yet the staff at that point did not have the opportunity to look thru the Original longer document. Can you now understand how we feel our care providers have been short changed. This is omission of data.

[4] We have learned the Persian Gulf Registry or CCEP both fail to **inquire on the field sanitation / Hygiene conditions** which the soldier endured. The easiest way to spread contamination is from hand to mouth. Remember there were many occasions - some due to battle tempo and other times due to water container contamination, hand washing before consuming a meal was not possible. The Rand Corp told me, that this **issued was not evaluated** or investigated by them , when they published their reports.

[5] We are concerned VA Researchers and Physicians have **been denied access** to databases of health logs from the Surgeon General office ARCENT and reports generated the OSAGWI & OSAGWI-MRMD offices. Omission of the data only slows down leads which scientist could be investigating.

[6] I am immunized of the anthrax and botox during my service. VA doctors tell me that they are **not required** to fill out VAERS (**Vaccine Adverse Event Reporting System**) Forms. DoD or VA practioners till this day have failed to perform diagnostic tests on me **to rule out** immunologic dysregulation. This action demonstrated LACK of concern about the health consequences of the series of shots on myself and others have reported to me.

[7] "**Significant deviations,**" reminiscent of similar violations by the military during the Persian Gulf War, when it failed to keep vital records, monitor effects, and properly inform troops they were receiving an unlicenced drug and vaccine. In Bosnia, nearly 4,000 soldiers were told during military briefings that the vaccine, called TBE, was "already known to be very safe and extremely effective.(PSOB In its last official act before closing up shop, the gulf war commission issued a report condemning the government's performance in Bosnia with the vaccine. "An abysmal failure," the commission concluded. This dose not show veterans the LESSON LEARNED.

[8] From 1968 to 1970, Rostker served as an economist. From 1984 to 1994, Rostker worked for the RAND Corporation as Deputy Director of the Army studies and analysis center and then as Director of the Defense Manpower Research Center. Today he again works as a consultant for the Rand Corp. This does not pass the smell test and **deserves greater scrutiny**. OSAGWI first director B. Roster, retired and immediately began consulting position with Rand Corp. Rand Corp had been contracted to do 2 or more studies for this office.

**conflict of interest issue was the lesson learned**

President Cancels Ethics Executive Order , President Clinton recently canceled his first executive order (Ethics Commitments By Executive Branch Appointees) because it forced a five-year lobbying ban on senior officials and trade negotiators after they leave government with any agency where they had served or had any responsibility. Executive Order 12834 was released with great fanfare in 1993 because of its ethical requirements. The cancellation is effective at noon on Jan. 20, 2001

[9] We fear the VA may modify the Gulf War Veterans Health Examination Protocol introduced by Lt. Col.Jame Riddle of Health Affairs DoD and indorsed by Dr. Charles Engle of Walter Reed Army Hospital- Deploymental Health Clinical Center to follow the (CPG) post-deployment health evaluation and management clinical practice guidelines

(Birch & Davis publisher). This "Guidelines" are 'medical-ese' for "standard of care". Even though they sound like something less than mandatory, they are completely mandatory. In the VA and DoD, commanders and directors are graded on how well their doctors follow them.

Problem is Abuse of Somatization diagnosis  
Psychology is recommended before Neurology  
IATROGENESIS type diagnoses is given before Neurology  
SOMATIZATION type diagnoses is given before Neurology / Immunology evaluations are completed.

We veterans suffer because VA Researchers have been unable to obtain a answer to how many blood and tissue samples, the OSAGWI & OSAGWI-MRMD offices turned away (declined review) from Foreign and American Civilian Institutions. This is denial of scientific leads.

Let us Learn and Enforce this Lesson  
It is simple, we want MANDATORY phase II blood labs, Non-standards testing ie. ( SPECT scans ), reporting of sub acute conditions, and mandatory VAERS reports of any vaccine veterans received in service. Allow this to be a **influential part** of deployed health care services.

The Lessons Learned on deployment health care look different from the **view of the end user**. We appreciate you time and attention to my presentation. We early look forward to address any issues addressed in this statement today or in the future.

**From:** Brown, Mark A <mbrown1@hq.med.va.gov>  
**To:** 'Venusval hammack' <jagmedic@gulflink.org>  
**Subject:** RE: Can Gulf War Vets Use VESTED-CARE ?  
**Date:** Monday, January 29, 2001 12:30 PM

I'm out of town until Thursday, and I'll check out this directive then. But I can tell you now that VA in general doesn't pay for examinations outside of the VA healthcare system. Conceivably, if a patient got a referral from a VA physician for something not available within VA, it could be possible.

Mark Brown

-----Original Message-----

**From:** Venusval hammack [mailto:jagmedic@gulflink.org]  
**Sent:** Monday, January 29, 2001 12:05 PM  
**Subject:** Can Gulf War Vets Use VESTED-CARE ?

Reference to: VESTED-CARE<?xml:namespace prefix = o ns =  
"urn:schemas-microsoft-com:office:office" />

VHA DIRECTIVE 99-060

( Veterans Integrated Services Network )  
( Veterans Equitable Resource Allocation )

It is my understanding that As a result, for FY 2000, VA decided that Basic Care patients will now consist of two groups;

- [1] fully-vested, those who rely on VA for their care and
- [2] non-vested, those who have not entrusted their care to VA but do use some VA healthcare services.

A patient is considered fully vested in the veterans healthcare system with the completion of an appropriate, detailed medical evaluation during the past 3 years. This is determined through the presence of a Current Procedural Terminology (CPT) code that is inclusive of an appropriate medical evaluation.

Question: Does the Vested Exam include testing and funding for Specialized Programs?  
Question: Which Current Procedural Terminology (CPT) codes does this exclude or include ? (post which ever codes list is shortest)

Intention: If vested care will provide funds to get a Gulf War veteran examined outside of Traditional VA funded models, then can we use this source as a "all else failed" alternative?

FOR THE DURATION... Venus  
Gulf War Liaison jagmedic@gulflink.org <mailto:jagmedic@gulflink.org>  
DSBR,PGEV, NGWRC

North Shore Chapter  
 Commander  
 Venus-val Hammack



US. ARMY  
 WOMEN ARMY CORP  
 GULF WAR &  
 VIETNAM ERA VET

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State Commander  
 Stephen Reynolds

*Gulf War Liaison for*  
 North Shore Veterans  
 Council Services -

Desert Storm  
 Battle Registry -

National Gulf War  
 Resource Center -

National Assoc for  
 Black Veterans

DAV LIFE MEMBER

VFW POST 507

AM LEGION 85

Combat Medic Assoc

**Memo to:** Military Veterans Legislative Aide  
 Office of Senator Kerry (MA)

**Fax To:** 202-224-8525

**Date:** December 3, 2000

**Problem:** CCEP ending and CPG program starting.

LtCol Riddle wrote:

I have put together a couple documents explaining the transition of the CCEP as recommended by the Institute of Medicine (IOM) into a more comprehensive and global post-deployment clinical evaluation program using our post-deployment health evaluation and management clinical practice guidelines (CPG).

We have been working on this transition for over two years, with implementation expected mid- to late next year. >> (2001) charles.engel@amedd.army.mil

Current status:

It now looks like the contractors Birch & Davis are in a stale mate on finishing the CPG, being that Dr. Engle suggested they have veteran input to finish them.

Dr. Charles Engle of Walter Reed Army Hospital, Lt. Col.Jame Riddle of Health Affairs, and Claypoole of the Veterans Coordinating Board, and Mark Brown of the VA are working on the finishing touches.

Our postion:

CCEP was well intended, then abused very quickly by DOD and VA. For more than 2 years we have been trying to change parts of it to make those test mandatory.

The new program DOD is working on is strictly voluntary, and is modeled on concept that VA doctors know best. Those doctors working with patients are given a suggestion book, and have to operate under VA budget constraints. Which are quickly heading towards tricare funding models.

CCEP has funds available outside of VA sources and can be used to make things manadatory for the large number of VA staff that are NOT upto speed on subtle Gulf War illnesses.

Even Dan Bullis at Walter Reed Army Hospital is not happy with how the new reporting system will go through his meager department. Complex Intranet harware and phone PBX systems will be routed to a archaic phone system at Walter Reed.



The New Deployment Health Clinical Center (DHCC) program that Bernard Rostker himself designed - signed off on - then got promoted to push through DOD actually has NOT been peer reviewed. This to me means Dr. Bernard Rostker wants to pawn off Somatization on all era medical incidents, since it worked so well AGAINST the Gulf War community.

We oppose the new system because it is fool hardy, and CCEP has some working elements worth fighting for. Most of all I oppose it because Bernard Rostker wants it, and what ever Bernie wants has generally been disastrous for US.

Mark Brown, PhD of the DVA Central Office/Environmental Agents Service (202-273-8579) told us that if the diagnostic exams in the CPG are made mandatory that the federal practitioners will quit their jobs.>>

If this was a true situation, then why did the doctors quit during the CCEP program with its mandatory phase testing existed.

We request that this congressional office do the following:

1. tell DoD office of Health Affairs demand their personal input to the new CPG program as promised at the last Presidential Special Oversight Board (Rudman) meeting.
2. tell Mark Brown, PhD of the DVA Central Office that the veterans disbelieve his evaluation of the doctors reaction to mandatory guidelines in the New CPG.
3. this Congressional Office will **sent a representative** to the attending the NSO meeting at the Pentagon come December 5th, 2000 9:00 a.m. Room 2E687 Pentagon  
Washington, DC Contact: 1-800-754-2132 Dianne Lawhon ( PAO ) to ask for formal escort to room when entering at Metro entrance at Pentagon.

*Venus-val Hammack*

DESERT STORM  
BATTLE REGISTRY  
P. O. BOX 77381  
WASHINGTON D.C. 20013-7381  
FAX 540-477-2941

ONE HUNDRED SEVENTH CONGRESS  
**CONGRESS OF THE  
UNITED STATES**  
U.S. HOUSE COMMITTEE  
VETERANS AFFAIRS  
COMMITTEE

VENUS-VAL HAMMACK  
U.S. ARMY RETIRED  
GULF WAR COMBATANT  
99 WOODLAWN STREET  
LYNN, MA 01904-2845  
jagmedic@gulflink.org  
www.gulflink.org  
DEPLOYMENT HEALTH Liaison

**Gulf War Undiagnosed Illness Act of 2001**

I do not wish to be short changed again nor should other disabled vets. Support 107th HR 621, it now has over 200 co-signers. Why hasn't this bill gotten discharge from committee and become a public law yet? Or Please add its wording to HR 1406.

**Issue 1**

Please read this, because Principi has shown his real colors. The DVA wants to kill the GULF WAR PRESUMPTION BILL. The decisions basically shot down PB, Vaccines, Sarin, and Depleted Uranium as having ill effects on Gulf War vets. Principi is very ANTI-veteran in this one -----

The Secretary has concluded that the establishment of a presumption of service connection is not warranted.

DEPARTMENT OF VETERANS AFFAIRS

**ILLNESSES NOT ASSOCIATED WITH SERVICE IN THE GULF DURING THE GULF WAR**

SUMMARY: As required by law, the Department of Veterans Affairs (VA) hereby gives notice that the Secretary of Veterans Affairs, under the authority granted by the Persian Gulf War Veterans Act of 1998, Pub. L. 105-277, 112 Stat. 2681-742 through 2681-749 ... has determined that there is **no basis** to establish a presumption of service connection for **any disease based on service** in the Persian Gulf during the Persian Gulf War. FOR FURTHER INFORMATION CONTACT: John Bisset, Jr., Consultant or Bill Russo, Attorney-Advisor, Compensation and Pension Service, Regulations Staff, V BA. [Source 6 July 01 Federal Register]

**ISSUE 2** ←

**DEPLOYMENT HEALTH STILL MOSTLY GULF WAR ISSUES**

As you know, DoD is heading down the road of Deployment health scenarios. This list below is from their servers, and by the deployment title is the type of long term campaign it was associated with. Strange that OSAGWI doesn't want to deal with when 53% of its issues are still GULF WAR RELATED.

- |                           |                              |                             |
|---------------------------|------------------------------|-----------------------------|
| Desert Focus - Gulf War   | Desert Fox - Gulf War        | Desert Shield - Gulf War    |
| Desert Spring - Gulf War  | Desert Storm - Gulf War      | Desert Strike - Gulf War    |
| Desert Thunder - Gulf War | Northern Watch - Gulf War    | Pacific Haven - Gulf War    |
| Proven Force - Gulf War   | Provide Comfort - Gulf War   | Quick Transit - Gulf War    |
| Southern Watch - Gulf War | Vigilant Sentinel - Gulf War | Vigilant Warrior - Gulf War |

**Issue 3** ←

**VA IS GETTING BOLDER, AND CERTAINLY NOT BETTER**

This is actually a field test to see who is watching and who will protest this. With this getting through, it will be possible for the VA to try even more daring scenarios. For what your seeing is UNFAIR TRADING PRACTICES - Protected under Anti-Trust Laws of the United States. Meaning that VA can now pick ONE company product over another regardless of price or vender.

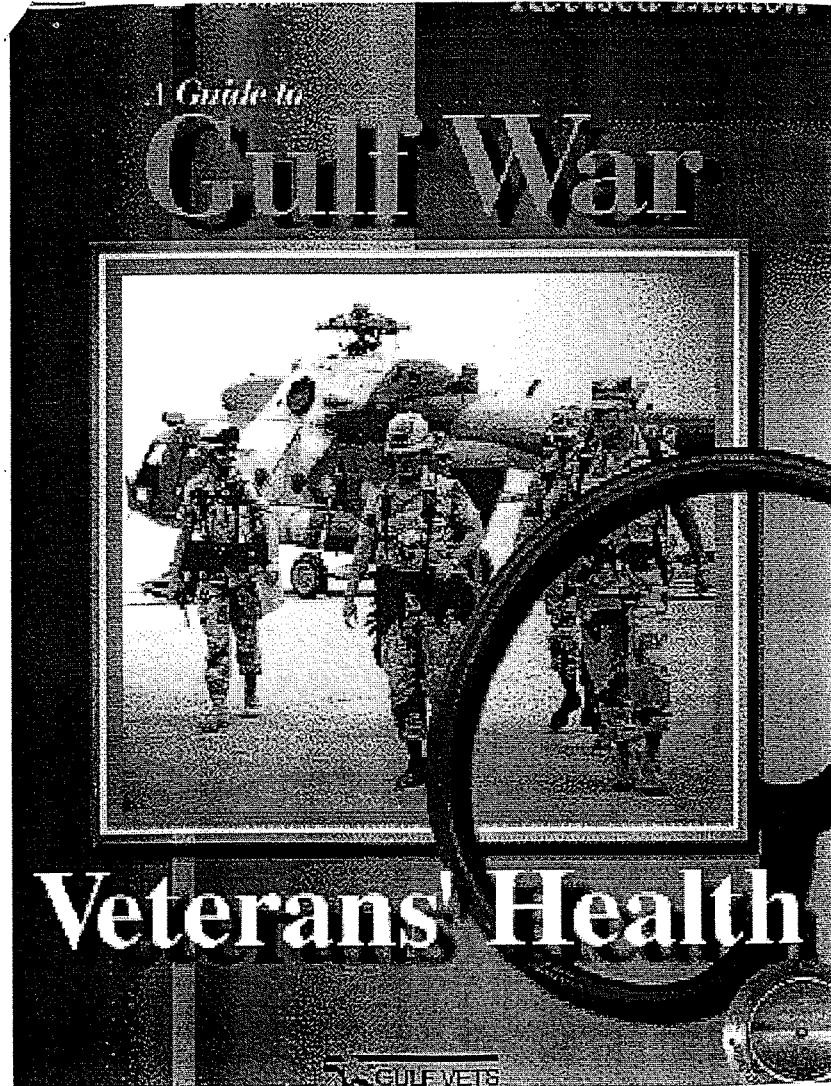
DEPARTMENT OF VETERANS AFFAIRS - 48 CFR Parts 801, 806, 812, 837, 852, and 873

VA Acquisition Regulation: Simplified Acquisition Procedures for Health-Care Resources

ACTION: Withdrawal of proposed rule and promulgation of a new proposed rule. Under the provisions of 38 U.S.C. 8153, health-care resources consisting of commercial services, the use of medical equipment or space, or research, acquired from an institution affiliated with VA in accordance with 38 U.S.C. 7302, including medical practice groups and other approved entities associated with affiliated institutions ... **may be procured without regard to any law or regulation that would otherwise require the use of competitive procedures.** [ Source: Federal Register]

**Issue 4**

The AFIS/Armed Forces Information Service - DoD agency has interfered with competition of free enterprise by this purchase! On the eve of its sale to Ogdan Newspapers last week, the Department of Defense (DOD) bid \$1 million to purchase the financially distressed **The Stars and Stripes**, the country's oldest veterans advocate newspaper with roots extending back to the Civil War. The DoD has signaled, however, that it will let the venerable newspaper lapse, and veterans and veterans groups around the country are calling First Amendment, free speech foul. "The DoD bought it just to shut it up," said Doug McArthur president of the National Veterans Organization of America. **Veterans demand the GAO charge AFIS with a "Bid Protests" and denial approval of the sale.**



TESTIMONY OFFERED TO THE HOUSE VA COMMITTEE- SUBCOMMITTEE HEALTH

January 24,2001

Montra D Nichols  
Vice Chairman  
National Vietnam and Gulf War Veterans Coalition

Thank you, Mr. Chairman and House Subcommittee members for inviting our testimony today. It has been 11 years since the Gulf War and Lessons should have been learned that need to be applied now and in the future.

We believe, that the first lesson learned has to do with fragmented records in the theater of war. Hopefully this issue is being given top priority. Medical records were fragmented, lost, hand carried, and then attempts made much later to find them and get them remarried up with reports and individual records. This simply can not happen again. There has never been a fully implemented regulation in regards to medical records maintenance in a theater of war and how they are to be handled and accounted for once the war is concluded. This must be rectified immediately. A tracking system must be initiated and maintained and quality control needs to be instituted.

The second lesson learned has to do with the maintenance of shot and records of preventive actions(pb) records and the recording of vaccine reactions for the individual service member, the individual's medical record, and for centralized record keeping. An educational process and a regulation must be implemented immediately. VAERS forms should be part of the process so that oversight can be completed by the FDA. There needs to be an independent agency permanently in place to provide oversight to this critical issue.

The third lesson is that documentation of environmental exposures need to be done for each service member. A regulation needs to be written, and reviewed by outside experts, and then implemented immediately. The regulation needs to cover documentation of chemical alarms, preventive measures taken(PB, vaccines, etc), environmental exposure(pesticides, endemic diseases, smoke, fire, DU and other weapon components, fuel exposures, etc), and biological exposures (projected, verified, unresolved). The documentation is needed in theater not as an after thought or after action. The theater surgeon needs to be held accountable for the overall institution of this regulation and then shared responsibility with each unit commander and medical unit. Again, a system of civilian oversight should be implemented. The DOD is not without error.

The fourth lesson has to do with adequate laboratory testing for each individual being activated, deployed, or being involved in the pre deployment stage(those that receive vaccinations in preparation for being deployed), and those that are involved post deployment (secondary

exposures from returning equipment or personnel). Each group needs to be identified clearly. Each group needs a complete baseline of laboratory data and samples maintained for future reference. The laboratory testing needs to extend past the common standard physical exam to include baseline viral panels, immunological panels, blood clotting studies (HEMAX-ISSAC Panel). We must also now address those individuals that were non-deployed and address their compensation and medical needs.

The fifth lesson is to have a more open mind set for veterans of a war whether deployed or not in a wartime period. It should be standard to think ahead to the post war needs. Each group of veterans should not have to suffer through years of battles with differences of opinion on potential or real exposures. There needs to be a more Proactive role played in relationship to the veteran that bore the cost of battle. The trust and faith in this nation has been impacted more than I believe the Hill or DOD wants to acknowledge and this is directly related to the history of the delay in recognizing veterans medical needs following each conflict. It becomes another war for the veteran/veterans to prove their medical problems and this war is against our own government and this is WRONG and MUST FOREVER BE CHANGED NOW. The DOD should not be allowed to stand between the servicemen and women and their individual medical needs. Never again should the integrity and honesty of your veterans be questioned. It belittles the veteran and only adds to the problems of readjustment of the returning troop. It demoralizes the past and present and future troops.

WE need a more proactive spirit in the VA. If a lab test is found that helps identify a medical problem. Then the VA should be the leader and embrace these new lab tests, instead of delaying potential medical discoveries/treatments and languishing in endless research. The majority of veterans receive no testing and no breakthroughs in potential medical treatment that could help stabilize them and possibly return them to good health. Endless battles are fought by researchers and veterans against the old standard of refusal and denial. Put a priority on lab work that leads to treatment modalities.

We must respond by keeping the check book open when our veterans return and need help. We should not have to go and battle for funds for the post war period for medical and compensation issues. This is simply poor planning and not maintaining the trust you have with each service member past, present, or future. WE must not use any excuse whether it be denial of exposure, cost factor, or endless research battles now or in the future in meeting the needs of our military, veterans, or civilians. We must have emergency financial resources to protect the veteran before they end up in despair. We were warned by the overwhelming response to the civilian death and injuries on 9-11. Have we paid as much attention to the veterans and military personnel needs? Do we not need to also identify this need to the American public?

WE must fully implement that the benefit of the doubt goes to the veteran now, in the future, and in the past.

Our VA and military medicine must become a leader and not a follower. Laws need to be

enacted to protect the whistle blower serviceman, commander, officer, doctors, and researchers. It has been the standard technique to deny, discredit, and malign those that step forward to help. These individuals are not enemies of the state, national security, or defense. These individuals have morals, ethics, and integrity for the freedoms we all hold so dear. The gulf war veterans know of civilian, military, VA doctors that have been harmed and intimidated for simply stepping forward to help the injured and affected veteran. We know of fellow service members/veterans of different ranks that have been ordered to stay quiet, not to speak up, and disciplined if they attempted to do so. The human rights and medical needs of the troops need to be a top priority immediately.

What is needed immediately for the gulf war veterans is immediate access to definite high level medical testing. This includes any lab test that might provide answers on the medical PHYSICAL state of the veteran. The laboratory tests that might directly lead to treatment needs to be implemented immediately without delay or debate. The Psychosomatic, psychiatric labeling of the gulf war veteran must be stopped. Psychiatric diagnosing is not to be utilized as priority over a complete physical examination and appropriate medical diagnosing. This is setting bad standards and a blind monkey approach that will hurt us as we look at the future of chemical and biological warfare. WE must be the leader not the denial agent. The military personnel, the veteran, and the public can handle any occurrence if dealt with honestly instead of dealt with by the employment of RISK MANAGEMENT TECHNIQUES. WE are in the year 2002 and there is not time for us to repeat the mistakes of the past. The overall cost is immeasurable in public confidence and delays of medical breakthroughs. WE must not let the cost of medical needs block us from providing the best medical care for our soldiers and veterans.

WE are the leader of the free world and we must also be the leader in dealing with Medical Patient Rights that apply to the military and veteran as much as to the civilian public. This has become very clear to the American public since September.

Show us that you have heard the veterans of all past conflicts and have learned the lessons of the past. Treat the medical cost of service members and veterans in a higher priority than spending extended to foreign aid and military equipment and transportation. Reevaluate and Reorder the priorities. Do not rob peter to pay paul. Pay the bills that are past due. Honor the commitments and contract made with your service members and veterans.

WE must all come to the table together to resolve these issues of the past and the future. That is where America's true strength lies.

Thank you again for providing us this opportunity.

## WRITTEN COMMITTEE QUESTIONS AND THEIR RESPONSES

## CONGRESSMAN EVANS TO WARREN B. RUDMAN

1. In hindsight, was the case narrative approach necessarily the best use of DOD's resources in investigating reasons for service members' adverse health after service in the Gulf? Do you believe this was the most appropriate use of the Department's resources or should it have investigated more into original research and other investigations?

**Response:** DOD has conducted a dual-track strategy for investigating the undiagnosed symptoms that have prompted almost 12,000 Gulf War veterans to claim compensation.

First, the Department has funded 111 studies to determine possible medical causes and treatments for the undiagnosed symptoms some veterans have experienced since the war. DOD has coordinated its research portfolio with the Departments of Veterans Affairs and Health and Human Services to avoid redundant projects and to leverage the results of their 193 total projects funded at \$174 million.

Second, DOD established the Office of the Special Assistant for Gulf War Illnesses (OSAGWI) to investigate the release of nerve agents at Khamisiyah and to determine if other exposures to chemical or biological warfare agents (CWA and BWA, respectively) occurred during or after the Gulf War. OSAGWI conducted comprehensive Investigations of Khamisiyah, numerous alleged chemical detections, and the actual release of CWA at three Iraqi weapons locations during the air campaign. The resulting case narratives have permitted DOD and VA to identify and notify veteran cohorts that may have been exposed to CWA without unnecessarily alarming the almost 600,000 veterans who were not potentially exposed.

2. On what basis do you praise the "exceptionally high medical readiness of units returning from deployments to Bosnia, Kosovo, Kuwait, Haiti and Rwanda?" What improvements in Force health protection have contributed to this medical readiness?

**Response:** I based my statement on health and readiness data that Special Oversight Board staff examined. The Board's charter did not permit my staff to evaluate fully these deployments, so I can only surmise that improved medical intelligence, deployment procedures, command emphasis, and implementation of other lessons learned from the Gulf War contributed to the high readiness. The proof of that high readiness is obvious from the fact that we have not heard the kind of medical complaints following those deployments that we heard after the Gulf War.

3. Sen. Riegle will assert that detection warnings went off "tens of thousands of times" as the air war took place, yet DOD claims all the detections were false. Your Board found that there was no effort by DOD to "cover-up" information about the Gulf. Is it fair to assume, then that you share DOD assumptions that all of the bio-chemical detections in the Gulf were false alarms?

**Response:** DOD had *no* biological detectors during the Gulf War, and we will never know how many chemical detectors did alarm during the air campaign. No empirical data exists to substantiate claims that "tens of thousands" alarms occurred. What we do know is that none of the CWA released at Al Muthanna, Muhammadiyah, and Ukhaydir reached the Saudi border. We also know that none of the chemical agents in the Iraqi inventory could have risen into the jet stream unless they were heated to temperatures hotter than those DOD uses to incinerate chemical munitions. Moreover, we know that M8 chemical alarms could not detect the very low levels of CWA released just ten miles away at Khamisiyah, so detecting even lower levels of CWA emanating from Iraq hundreds of miles away would have been beyond the chemical alarm's capability.

Questions from the Honorable Lane Evans, Ranking Democratic Member  
to Dr. Frances Murphy

**House Veterans' Affairs Committee  
Subcommittee on Health  
Hearing on Operational & Medical Readiness  
In the Active Duty Force  
January 24, 2002**

**Follow-up Questions for Dr. Frances Murphy  
Deputy Under Secretary for Health**

1. How many VAMCs have full-time Gulf War illness coordinators?

**Response:** All VAMCs have coverage by Gulf War illness coordinators, although this is not their only responsibility. Their responsibilities also include Gulf War, Agent Orange, and Ionizing Radiation registries. At some facilities, they have additional responsibilities for former prisoners of war, Compensation and Pension examinations, and other duties related to veterans' healthcare.

2. In many cases, the "Common Rule" requires patient advocates to be involved on Institutional Review Boards overseeing government-funded research. Given that fact, why shouldn't veteran advocates be included on the Research Working Group, the body responsible for deciding which Gulf War illness studies will or will not be funded?

**Response:** The Research Working Group (RWG) is not an Institutional Review Board (IRB). The RWG coordinates the overall Federal research portfolio on illnesses in Gulf War veterans. The RWG does not participate in the scientific review of individual research projects for funding. The Departments of Defense, Veterans Affairs, and Health and Human Services—the three agencies that participate in the RWG—perform this responsibility. The IRB functions of protecting human research subjects are the responsibility of the institution at which the Principal Investigator for each project works.

However, VA has recently taken steps to ensure that the opinions of Gulf War veterans are well represented in the arena of research on Gulf War illnesses. Secretary Principi has appointed a Research Advisory Committee on Gulf War Veterans' Illnesses, which will provide advice and recommendations to the Secretary on proposed research studies, research plans, and research strategies relating to the health consequences of military service in the Southwest Asia theater of operations during the Gulf War. The committee will review all proposed federal research plans, initiatives, procurements, grant programs, and other activities in support of research projects on Gulf War-associated illnesses and assess the individual projects and the overall effectiveness of government research to answer the central questions on the nature, causes, and treatments of Gulf War-associated illnesses. The activities of the Committee will both supplement and inform the activities of the RWG.



The membership of the Advisory Committee is diverse. Two of the 12 members of the Advisory Committee are officials with veterans service organizations, specifically the National Gulf War Resource Center and the American Legion. Two other committee members are Gulf War veterans. Six other members are health scientists, one is an official of a pharmaceutical company, and one is a business entrepreneur.

**3.** Describe and provide the information VHA provided its clinicians about the potential health hazards ENDURING FREEDOM veterans may encounter in the theater of operations.

**Response:** VA has prepared an information letter that addresses the main health concerns for military service in Afghanistan and South Asia. Entitled "Health Care and Assistance for U.S. Veterans of the Conflict in Afghanistan," it answers health-related questions that veterans, their families, and their health care providers may have about the military deployment to fight terrorism. It also describes relevant medical care programs that VA has developed in anticipation of the health needs of veterans returning from combat and peacekeeping missions abroad. The information letter was finalized on February 14, 2002 and distributed to all VA medical centers.

**4.** VA boasts of some impressive outcomes from 5 demonstration projects mandated by Congress. What actions has VA taken to disseminate the findings of these demonstrations to other VA facilities? How will it ensure the availability to these effective treatment models for Persian Gulf veterans.

**Response:** The Demonstration Projects were completed in December 2000. VA has taken several steps to disseminate the demonstration project findings to ensure that VA Medical Center directors and clinicians learn how they might incorporate effective treatment models for Gulf War veterans into their patient care.

- a) A reference in the newly released (January 2002) Veterans Health Initiative independent study course, "A Guide to Gulf War Veterans Health," notes that the five Demonstration Project study reports are available on the following VA website:  
<http://www.va.gov/health/environ/persgulf.htm>.
- b) Demonstration Project Principal Investigators presented their final study results at the "Conference on Illnesses Among Gulf War Veterans: A Decade of Scientific Research" in Alexandria, Virginia (January 24-26, 2001). Approximately 400 scientists, physicians, and health care providers attended this VA/DoD meeting.

- c) It was announced at the Weekly Conference Call for VA Medical Center directors on February 9, 2001, that the Demonstration Project executive summaries and full reports were available on the VA website noted above.
- d) Demonstration Project study information was discussed at the September 12-13, 2000, Plenary Session sponsored by the Military and Veterans Health Coordinating Board, Andrews Air Force Base, MD.
- e) Demonstration Project updates were provided to VA health examination registry physicians/coordinators participating in VA Environmental Agents Service quarterly national conference calls.
- f) The Demonstration Projects were featured in two VA Gulf War Review newsletter articles dated March 1998, and October 1998.
- g) Some Demonstration Project findings may eventually be published in the peer-reviewed literature. The five demonstration projects were described in the "Annual Report to Congress -- Federally sponsored research on Gulf war veterans' illnesses for 1999. Washington, DC: Department of Veterans Affairs, April 2001," from the Research Working Group of the Persian Gulf Veterans Coordinating Board.

5. VA still maintains four referral centers for Gulf War veterans with complex health care needs. What specifically do these centers offer veterans that other VAMCs do not? How many veterans availed themselves of these services in FY 2001? Given the demand still demonstrated by some Gulf War vets, has VA examined reasons that these centers might be under-utilized?

**Response:** The Referral Centers have evaluated approximately 770 veterans since the Gulf War. Eighty-four veterans were referred to the four Gulf War Referral Centers in FY 2001. On May 10, 2001, the Secretary of Veterans Affairs announced the establishment of two Centers for the Study of War-Related Illnesses located at VA medical centers (VAMC) in Washington, DC, and East Orange, NJ. The responsibility for the work conducted at the Referral Centers was transferred to the "Centers for the Study of War-Related Illnesses" at the beginning of calendar year 2002.

The primary mission of the Centers for the Study of War-Related Illnesses is to provide in-depth clinical care and evaluation for veterans who have debilitating symptoms that remain unexplained after thorough medical examinations at local VAMCs. Patients whose symptoms may be attributable to wartime experiences are particularly appropriate for referral to these centers. This would include Gulf War veterans who would have been referred to the "Gulf War Referral Centers" in the past. However, the responsibility of the new centers will be greater than the old referral centers in that they will evaluate and treat not only Gulf War veterans but also military veterans of other foreign deployments. The clinical

evaluation provided is multidisciplinary, yet focused upon the particular problems of each individual veteran. Where possible, diagnoses are made, and in all cases recommendations for management of the veteran's medical problems are provided to the referring center.

The new centers will develop ways to minimize illness and injury that can be implemented before, during, and after future conflicts and peacekeeping missions. Additionally, the centers will explore ways to improve health care for active-duty patients and veterans. Finding effective prevention and treatment will be a major purpose of these two new centers. The centers have academic affiliations with medical schools and other health professional schools. The educational component of the centers will help train VA's health care providers to deliver high-quality care to veterans. And the centers will collaborate with the Department of Health and Human Services and the Department of Defense (DoD), including DoD's Centers for Deployment Health, to ensure lessons learned are applied to active-duty service members as well as to veterans.

6. For over a decade, VA has been involved in a project to create Government Computerized Patient Records. First, what is the status of this endeavor? Is the Recruit Assessment Program a substitute for it? Second, could a standardized government computerized patient record assist VA in assessing veterans' health status and conditions?

**Response:** The Government Computer-based Record Project (GCPR), which began in 1998, is currently being tested and evaluated at 5 VA Medical Centers. The project has been segmented into smaller, more manageable components that facilitate achieving solutions in a phased approach. The first component – the Near Term Solution (NTS) – will enable the HIPAA-compliant, one-way transfer of a subset of protected electronic health information from DoD to VA on separated service members, including specific demographic information on veterans at the time of separation from military service, and laboratory results, radiology reports, and outpatient prescription data on previously separated veterans. The information on previously separated service members has already been extracted from all Military Treatment Facilities. The NTS is nearing the end of beta testing, and we expect to release it for use at all VHA facilities late this spring. VA clinicians will have the ability to securely view these patient data using existing VHA clinical software. GCPR is being renamed the Federal Health Information Exchange (FHIE) to more accurately convey the original and current intention of this interagency activity. Plans for the Mid-Term, and Long-Term Solutions are to deliver incremental pieces of useful functionality on approximately an annual basis.

The Recruit Assessment Program (RAP) is a DoD program to collect comprehensive baseline health information from all military recruits and maintain this information in a computerized, longitudinal database. The RAP collects baseline health data on military members. VA supports this DoD pilot program,

which is currently undergoing feasibility testing. If implemented, the RAP will be the first module of a life-long medical record of all military personnel and veterans. Baseline health data at recruitment is essential in order to develop a life-long medical record. The RAP would assist in determining and documenting veterans' conditions and disabilities, because baseline data can be compared with later health data to identify changes in a veteran's health status over time. Thus the health data provided by the RAP will help in clinical care and preventive medicine in both DoD and VA. The RAP, therefore, is not a substitute for, and will not serve the same purpose as, GCPR/FHIE. However, the information collected by DoD from service members in the RAP could potentially be accessible by authorized VA staff using GCPR/FHIE.

Obtaining all electronic health information that is available in DoD regarding service members during their period of service would significantly assist VA in assessing veterans' health status and conditions. As this information becomes more standardized across VA and DoD, it will be more useful in carrying out these assessments. This is the principle on which GCPR was based and is the principle on which future efforts under FHIE are based.

7. Dr. Murphy, your written statement says, "For many returning veterans, the unifying health risk factor appears to be the deployment itself rather than any identifiable exposure." What do you believe are the implications of such a statement on VA's research agendas compensation models? Is VA possibly arguing, along with many Vietnam veterans that there could be an "in-service" or "in-country" effect? Why would VA not examine the consequence of an "in-service" or "in-country" effect?

**Response:** Many veterans, upon returning from a war or other combat deployment, require specialized health care and financial assistance. Even healthy veterans may have questions about the health effects of wartime service and require access to health care. Our experience following the Gulf and Vietnam wars has shown that combat casualties do not always result in visible wounds. History teaches us that after all conflicts, many veterans will return with difficult to diagnose yet nevertheless debilitating health problems. Therefore, it is imperative that we develop new ways of responding to the health needs of these veterans, and that we plan in advance for the health care services and other assistance that may be required by war/combat veterans. VA has already taken positive steps in this direction.

The recently established Centers for the Study of War-Related Illnesses, with their focus on four core areas of medical care, research, risk communication, and education for health care personnel, provide what we expect to be an effective mechanism for the evaluation and in-depth clinical care of veterans who have debilitating symptoms that remain unexplained after thorough medical examinations at local VAMCs. The mission of these Centers is discussed in more detail in our response to question 5.

A clear lesson learned after the Gulf War is that VA and DoD clinicians need timely education on deployment health risks and on the causes and treatment of veterans' health problems. Because the post-deployment period is crucial for providing appropriate health care to returning service members, VA and DoD have developed a Post-Deployment Evaluation and Management Clinical Practice Guideline (CPG). This CPG was developed to assist primary care physicians in the evaluation of patients seeking care for health problems possibly related to deployment. It provides a structure, clinical tools, and linked resources, which allow primary care providers to diagnose and manage patients with deployment-related health concerns. The Post-Deployment Evaluation and Management CPG also applies to family members of deployed troops and is designed to support comprehensive education efforts related to deployment health risks. VA and DoD developed an additional, supporting CPG to assess veterans for chronic fatigue syndrome and fibromyalgia. A third CPG for PTSD is being formulated.

In regard to an "in-country effect" or an "in-service effect," currently VA does not have a position on this issue. While we continue to affirm that deployment appears to be the only unifying health risk factor for many veterans, it is as yet too early to determine what scientifically supportable conclusions that particular line of investigation might produce.

8. Dr. Holsinger suggests the need for "stand-by authority" to enable VA to rapidly establish a registry, allow registry examinations and establish specialized treatment programs for non-service connected veterans following a major deployment. Given the changes in law under P.L. 105-368 and P.L. 106-117 since the Persian Gulf registry was established, is such stand-by authority still necessary? If so, will VA provide the necessary technical assistance to create such authority?

**Response:** For the reasons outlined below, we do not believe that a special "stand-by authority" to create registries is needed at this time to ensure that combat veterans have access to high quality health care within VA.

Since the Gulf War, VA has learned important lessons about the health needs of returning war veterans and, as a result, has implemented significant initiatives that will lead to improved health care for veterans.

VA has worked with DoD to develop evidence-based clinical practice guidelines to evaluate and care for returning war veterans. The routine use of clinical practice guidelines will decrease the need for special clinical evaluation programs. For the first time, troops will be specifically screened in the primary health care setting for illnesses that may be related to a military deployment. The clinical practice guidelines will provide the same high quality health care for returning veterans as special clinical programs but will ensure that the health

problems of all war veterans are addressed whenever health care is sought within VA and DoD.

The new Centers for the Study of War-Related Illnesses at East Orange, NJ, and Washington, DC, will provide in-depth clinical care and evaluation for veterans with debilitating symptoms that remain unexplained after thorough medical examinations by local VA medical centers. In addition to this primary mission, each center incorporates four major areas, including clinical care, research, risk communication and education of clinicians. These new clinical care and research centers will help ensure that future war veterans receive the best medical care available.

Moreover, the "Veterans Programs Enhancement Act of 1998," Public Law 105-368 has gone a long way toward ensuring that veterans of military conflicts now have greater access to high quality healthcare. The law authorized VA to provide health care to service members who served on active duty in combat in a war after the Gulf War or during a period of hostilities after November 11, 1998, for a two-year period following their release from active service for any illness, even if there is insufficient medical evidence to conclude that such condition is attributable to such service. This two-year period will allow for the collection of basic health information and aid in the evaluation of specific health questions, such as difficult to explain illnesses. The Department believes that continuation of this treatment authority is critical for VA's ability to provide comprehensive health care to veterans who serve in future combat missions.

SENT BY: DEPARTMENT OF VETERANS AFFAIRS; 202 273 7671; FEB-26-02 10:42AM; PAGE 1  
Attachment to Question #3



DEPARTMENT OF VETERANS AFFAIRS  
Veterans Health Administration  
Washington DC 20420

IL 10-2002-003  
In Reply Refer To: 13

February 14, 2002<sup>2</sup>

UNDER SECRETARY FOR HEALTH'S INFORMATION LETTER

HEALTH CARE AND ASSISTANCE FOR U.S. VETERANS  
OF THE CONFLICT IN AFGHANISTAN

1. **Purpose.** The attachment to this letter from the Under Secretary for Health briefly describes the main health concerns for military service in Afghanistan and South Asia. It answers questions that veterans, their families, and their health care providers will have about this military deployment to fight terrorism. It also describes some relevant medical care programs that the Department of Veterans Affairs (VA) has developed in anticipation of the health needs of veterans returning from combat and peace-keeping missions abroad. These points are presented in Attachment A, Health Care and Assistance for U.S. Veterans of the Conflict in Afghanistan.

2. **References**

- a. U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at <http://chppm-www.apgea.army.mil/>
  - b. World Health Organization (WHO) Updates available at <http://www.who.int/disasters/>
  - c. U.S. Army Center for Health Promotion and Preventive Medicine, "A Soldier's Guide to Staying Healthy in Afghanistan and Pakistan," December 2001.
3. **Follow-Up Responsibility.** Questions regarding this information letter may be addressed to the Environmental Agents Service (131) at (202) 273-8579.

Frances M. Murphy, M.D., M.P.H.  
Acting Under Secretary for Health

Attachment

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IL 10-2002-003  
February 14, 2002

**ATTACHMENT A**

**HEALTH CARE AND ASSISTANCE FOR  
U.S. VETERANS OF THE CONFLICT IN AFCHANISTAN**

Following the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, the United States (U.S.) began deploying military personnel to South Asia. Before the New Year, over 30,000 active duty men and women were involved in this deployment, on land, sea, and air; and, about 50,000 reserve personnel were called to active duty. Today, U.S. troops are on the ground in Afghanistan, Pakistan, and neighboring former Soviet Republics.

1. As in all hazardous deployments abroad, some service members will return with deployment-related health problems. In Afghanistan, they are especially at risk for local infectious diseases, traumatic injuries, and injuries due to cold exposure and operations at higher altitudes. As in all wars, returning troops will suffer from the psychological effects that can result from surviving any dangerous experience, and some will return with symptoms that are difficult to explain.

2. This fact sheet describes the main health concerns for service in Afghanistan, Pakistan and surrounding areas, and answers questions that veterans, their families, and their health care providers may have about this deployment. It also describes medical care programs that the Department of Veterans Affairs (VA) has developed for veterans returning from combat or peace-keeping missions, and how to contact these programs.

**3. Afghanistan Background**

a. Afghanistan is an extremely poor, landlocked country that is about the size of Texas. Traditionally, Afghanistan is highly dependent on farming and raising livestock. Its capital is Kabul, and the geography of its 30 provinces mostly includes rugged mountains as high as 24,560 feet, as well as lower plains in the North and Southwest. The climate is arid to semiarid, with cold winters and hot summers; the rainy season lasts from October to April.

b. After gaining independence from the United Kingdom in 1919, Afghanistan experienced ongoing political and military upheavals, including nearly 10 years of Soviet military occupation and more recent terrorism-related activities. On top of that, 3 years of continuous drought has led to widespread crop failures and water shortages. Recently, about one-third of its estimated population of nearly 27 million fled the country; about 6 million refugees are thought to be in Pakistan and Iran. These events have badly damaged Afghanistan's health and economic infrastructure, producing a short average life expectancy of about 46 years and per capita purchasing power equivalent to \$800 per year.

**4. Health Risks to U.S. Service Members**

a. According to the Department of Defense (DOD), troops may be exposed to a variety of infectious diseases, cold injury, and high altitude illnesses because of this area's very high mountains. Environmental hazards also may pose a health risk to deployed forces, including exposure to sewage, agricultural and industrial contamination of water and food supplies, localized air pollution, and severe sand and dust storms.



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used pesticides that are widely available at grocery, garden supply, and other stores. Both are approved for unrestricted use in the United States.

b. Permethrin has very low human toxicity, and is widely used in the United States for protection against insect pests. However, following very large exposure by swallowing or inhaling, clinical signs of permethrin poisoning can become evident within a few hours. Even in rare cases of human permethrin poisoning there is no evidence of long-term health problems following recovery from the initial poisoning.

c. The common insect repellent DEET is estimated to be used by at least 50 million Americans each year to keep away insect pests such as mosquitoes and ticks. There have been a few reports of tingling, mild irritation, and skin peeling following repeated skin application. In adults, ingestion of enormous doses of DEET has been associated with immediate toxic effects, but no long-term health effects have been documented.

d. Some researchers have suggested that exposures to a combination of pesticides and other compounds might cause health problems not seen with exposure to the same compounds individually. Such effects may not be important to humans except perhaps under extraordinary exposure conditions; that is, when used according to label instructions long-term health problems are not expected. Ongoing federally funded research efforts will help to clarify this matter.

**10. Deployment Stress and Health.** DOD advised service members deploying to Afghanistan that stress, fatigue, and depression during deployment could lead to injury and illness.

a. Deployment-related stresses include jet lag, change of diet, longer work hours carrying heavy gear, rapid and continuous pace of deployed military activities, and psychological stress. According to DOD, service members particularly at risk include those who are exposed to human suffering, death, or combat, or who are distracted by worries about home and family.

b. Service members are warned that though return from deployment can be festive and cheerful, a homecoming can turn into a stressful event for personnel and their families who are not alert to the impact of changes that occurred during separation. Further, the individual returning from deployment may still be experiencing the effects of deployment. DOD advises service members to recognize symptoms of depression, including changes in or withdrawn behavior, excessive tiredness or insomnia, changes in appetite, or feelings of despair.

c. Preventive measures include seeking help from health care professionals, a chaplain, or other medical personnel, maintaining physical fitness, increasing sleep when possible, proper using of over-the-counter medications, avoiding alcohol and tobacco products, and establishing a reliable support network of family and friends.

**11. Deployment-Related Health Effects**

a. The vast majority of veterans seeking health care at VA medical facilities come in with common diagnoses and receive effective treatments. However, based on experience with veterans returning from previous U.S. conflicts abroad, it is now understood that some veterans will return from hazardous military deployments with difficult-to-diagnose but nevertheless

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serious symptoms. In fact, concerns about chronic physical symptoms have arisen after every major conflict, and the same types of health problems are frequently seen among civilian Americans.

b. Veterans, their families and their health care providers must anticipate these deployment-related health problems in veterans returning from the current deployment to South Asia and Afghanistan. In response, VA has established new Centers for the Study of War-Related Illnesses, and developed new clinical practice guidelines that give health care providers the critical tools they need to help veterans with difficult-to-diagnose illnesses.

**12. Health Care Resources for Returning Veterans.** VA has extended health care benefits for those veterans who have served in combat. Based on what was learned from veterans from previous conflicts, VA has developed new programs for providing treatment and other assistance to those veterans.

a. In 1998, VA was authorized to provide a broad range of health care services to U.S. veterans who served on active duty in a designated theater of combat operations. Such veterans are eligible for 2 years after leaving the military for VA hospital care, medical services, and nursing home care for any illness, even if there is insufficient medical evidence to conclude that their illness was a result of their combat service (see Public Law 105-368, Section 102, codified at Title 38 United States Code (U.S.C.) 1710(e)(1)(D)).

b. This law means that combat veterans will have access to high-quality health care at VA medical facilities for 2 years, based on their service in combat, without having to prove that their health problems may be related to their combat service or to toxic exposures during their active service. For locations of VA medical facilities, check the telephone book, or [www.va.gov](http://www.va.gov), or call 1-877-222-VETS (8387).

**13. VA's New Centers for the Study of War-Related Illnesses.** These two new centers in Washington, DC, and East Orange, NJ, are focusing on the difficult-to-diagnose illnesses seen in veterans following all wars. A fact sheet describing the clinical and other services provided by the two centers, "VA Centers for the Study of War-Related Illnesses," can be obtained from Environmental Agents Service (131), or by calling the nearest VA Medical Center.

**14. VA's Vet Centers.** There are more than 200 community-based Vet Centers located around the country. This program was originally developed in response to the readjustment needs of returning Vietnam veterans. Based upon their successes, today Vet Centers are open to other veterans who served in combat and who suffer from psychological war trauma. They also offer accessible readjustment counseling, extensive case management and referral activities, and other supportive social services. For many veterans who might not otherwise seek VA assistance, the Vet Centers serve as a local resource for VA health care. Phone numbers for local VA Vet Centers can be found in the telephone book, or go to [www.va.gov](http://www.va.gov), or call 1-877-222-VETS (8387).

**15. VA's Website on Afghanistan Health Issues.** VA's Website on Afghanistan health issues is available at [www.va.gov/About\\_VA/Orgs/VHA/VHAProg.htm](http://www.va.gov/About_VA/Orgs/VHA/VHAProg.htm).

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**16. VA Health Care and Assistance for Veterans.** VA is here to help all U.S. veterans. VA's mission is to serve America's veterans and their families with dignity and compassion and be their principal advocate in ensuring they receive medical care, benefits, social support, and lasting memorials in recognition of their service to this Nation.

**17. Additional Information.** Through its Veterans Health Administration, VA offers primary care, specialized care, and related medical and social support services for veterans. This care is provided by about 163 hospitals, over 800 ambulatory care and community-based clinics, 135 nursing homes, 43 domiciliaries, 206 readjustment counseling (Vet) centers and various other facilities. VA also conducts research on veteran health issues, and fosters education of health care providers. More information about the range of services available at the local VA facilities can be obtained through the telephone book, or by checking online at [www.va.gov](http://www.va.gov).

**18. References.** Sources include:

- a. "The World Factbook 2001 -- Afghanistan" available on line at <http://www.odci.gov/cia/publications/factbook/index.html>.
- b. U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at <http://chppm-www.apgea.army.mil/>.
- c. World Health Organization (WHO) Updates available at <http://www.who.int/disasters/>; and
- d. U.S. Army Center for Health Promotion and Preventive Medicine, "A Soldier's Guide to Staying Healthy in Afghanistan and Pakistan," December 2001.

## CHAIRMAN MORAN TO DR. JAMES HOLSINGER

Questions for the Honorable James Holsinger

1. Dr. Holsinger, you had a key role at the VA in leading VA's early response to health problems of Gulf War veterans, and the Committee commends you for the stand you took 10 years ago to get veterans the care they needed. In your statement you indicated that VA needs a "stand-by" authority to treat veterans of future wars. The nature of military service has changed since the mandatory draft was ended about thirty years ago. Today's military is bifurcated: career-oriented professionals and reserves. Most of these individuals are not "veterans in the classic sense of a conscripted soldier serving a brief period – instead, they have decades' long associations with the Defense Department. Do you think that your idea of "stand-by" treatment authority for VA is still pertinent in a post-conscription era, and why?

Yes, I do believe that "stand-by" treatment authority for the VA is still required regardless of the draft being halted 30 years ago. As noted in the question, there are reserve forces composed of members who have not served on active duty and who are therefore not "veterans." The Persian Gulf War demonstrated that these individuals could and would be called to serve in the combat zone and when the conflict ended they were rapidly returned to civilian as well as veteran status. "Stand-by" treatment authority 10 years ago would have shortened the time required to have broad-based programs in place for these individuals. Future conflicts will likewise be fought with reserve members of the Armed Forces present in the combat zone with many such individuals becoming "veterans" due to having been called up to fight.

2. Dr. Holsinger, please give the Committee the context of the working environment in which you found yourself after the Gulf War ended. Was there opposition within the ranks of the VA after the war to developing responses and policies to deal with the needs of Gulf War veterans? If so what forms did these concerns take and what do you recall having done to address any such concerns?

In the VA there was no opposition to developing responses and policies to deal with the needs of Gulf War veterans. We were still in the throes of the issues surrounding Agent Orange from the Viet Nam War and no one wanted to see such difficulties occur following the Gulf War. We were, however, frustrated that we did not have legislation that would enable us to immediately move to put in place all of the efforts that we believed would be required to deal with the service members returning from the Gulf.

3. Dr. Holsinger, the Committee is familiar with the Dwight Eisenhower VA Medical Center in Leavenworth, Kansas, a location that, about 120 years ago, was a military "home" to over 4,000 veterans of the American Civil War. These men constituted the classic war-weary and suffered untold health problems. These injured and ill veterans, whom today might also be labeled homeless, addicted or even mentally ill, were gathered together in one massive federal group shelter. They were expected to hold formations, carry out various duties and work to the extent they could do so. Institutions such as Leavenworth (or Homes in Dayton, OH, Togus, ME, or here at the Soldiers and Airmen's Home in Washington, DC), have mostly gone by the wayside. We no longer require veterans to be gathered together in large institutions for care, but that particular history points up a challenge: in our decentralized society, as we deploy troops all over the world, then see them return and disperse widely throughout a very large country, how can we be sure that we have not created a new war-weary generation?

Basically we cannot be sure that we have not created such a war-weary generation. Every conflict seems to have created a certain number of such individuals – certainly this was seen following WWI, WWII, Korea and Viet Nam. My best guess is that for some individuals simply the stress of conflict could result in such a "war-weary" response. Certainly we have developed a significant approach to post-traumatic stress disorder with far greater understanding of the nature of the illness and its treatment since the Civil War. Likewise we no longer see institutionalization of individuals described above following the civil War as an appropriate method of care and/or treatment. However, the dispersal of individuals back into the society at large does pose problems from the point-of-view of providing excellent care for them.

4. Dr. Holsinger, the VA, DoD and others are spending massive sums through the Research Working Group, now amounting to \$200 million or more, on various biomedical research projects related to the Gulf War and its aftermath. Yet, with exception of a recent finding on Lou Gehrig's Disease, VA has said this research continues to fail to confirm the existence of a "Gulf War Syndrome." What are your views on these research efforts – are they worth the investment, or should VA and DoD instead invest more funds in ensuring the protection of future veterans with some of the proposals and initiatives that were discussed in testimony, or that various investigations have documents are still needed?

These research efforts are worth the investment since without them knowing how to protect veterans of future conflicts will be difficult to determine. Clearly, I would like for us to know explicitly what the causes of the illnesses of Gulf War veterans are. Knowing why these veterans are ill would markedly enhance our ability to protect future veterans.

5. Dr. Holsinger, Ms. Embrey's statement indicates that the Department of Defense is doing a creditable job in sustaining force protection in those currently deployed overseas. She suggests however, that veterans of prior deployments would be "best served" by having their post-deployment health problems subjected to medical research – presumably research overseen by VA or the Research Working Group. Do you agree with this policy? Do you sense any inconsistency in DoD policy based on the two positions outlined by Ms. Embrey?

Medical research is incredibly important to understanding the illnesses of veterans. Such research must be peer reviewed in order to maintain its quality. If there are political issues related to either the VA, DoD or the Research Working Group overseeing such research, an appropriate approach would be to fund the NIH to do and/or oversee this research.

CONGRESSMAN EVANS TO DR. JAMES HOLSINGER

House Veterans Affairs Committee  
Subcommittee on Health  
Hearing on Operational & Medical Readiness  
In the Active Duty Force  
January 24, 2002

Follow-up Question for Honorable James Holsinger, MD  
Former Under Secretary for Health  
Department of Veterans Affairs

1. What are the lessons learned regarding the VA Persian Gulf Registry Program? What types of parameters might “trigger” VA to develop registries for new generations of veterans? What were the benefits of the Gulf War registry to VA and/or veterans? In the event of another major deployment, what can we learn from your experience? Given the voluntary, but unscientific nature of the registry program, how can we make better use of a registry for tracking purposes?

The Persian Gulf Registry Program has provided the opportunity for Persian Gulf War veterans to be tracked by the VA for health care purposes. The registry is voluntary so it does not necessarily capture all individuals who may have suffered from health care problems secondary to deployment in the Gulf. Certainly a mandatory registry of veterans from any period of deployment would enhance the effective use of a registry. In light of both the Viet Nam War and the Persian Gulf War any deployment into a combat zone should be used as a “trigger” for the establishment of a registry. A registry provides veterans with the knowledge that they have a baseline health care status “in the system.” Such a baseline may help to provide a clearer understanding of any service-connected disability that may occur. Certainly the VA could have moved more rapidly to establish the Persian Gulf Registry Program had the Secretary of Veterans Affairs had standby authority to create such a registry.

CONGRESSMAN EVANS TO DR. SUE BAILEY

House Veterans Affairs Committee, Subcommittee on Health  
Hearing on Operational & Medical Readiness  
In the Active Duty Force  
January 24, 2002

Follow-up Questions for Honorable Sue Bailey, D.O.  
Former Assistant Secretary of Defense for Health Affairs  
Department of Defense

1. To your knowledge, what action has DOD taken since the Gulf to ensure that its health surveillance models can better assist DOD and VA in identifying hazardous exposures?

The DOD has instituted a policy that requires pre and post deployment physical exams that will provide improved health surveillance. They have also developed a successful vaccine tracking system for anthrax that can be applied to other medications and vaccines.

2. How confident are you that any health surveillance mechanisms will accurately portray all exposures and troop locations in a combat zone? What improvements in surveillance are needed to achieve these objectives?

I am very confident that today's technology can accurately portray virtually all exposures and locations in theatre. Appropriate computer systems have been developed and are known and available to the DOD that can accomplish this goal.

3. Should we be considering new models for detecting illness within deployed populations? If so, do you have recommendations about what model to use?

Disease and symptom surveillance is essential both to detect bio-warfare attacks and to ensure accurate health data from the battlefield. Yes DOD needs new models for surveillance and application of those they have in development or in current assets.

Additional Questions dated February 7, 2002

Please give the context of the working environment in which you found yourself after the Gulf War ended. Answer: I served as Deputy Assistant Secretary, Health Affairs in 1994,95, and as Assistant Secretary, Health Affairs 1998,1999,2000.

Was there opposition within the ranks of DOD and VA after the war to developing responses and policies to deal with the needs of Gulf War veterans? Answer: No.

How can we be sure that we have not created a new war-weary generation? Answer: There are always sequela to war but I believe the DOD and VA are aware and responsive to this phenomenae.

If this subcommittee made a fact-finding trip to Afghanistan and asked to see evidence that the health commands in ground combat units are carrying out these good intentions expressed at our hearing, in your judgment would the Subcommittee be satisfied with what we find, operationally and medically, and why? Answer: It would depend first on the sophistication available in the visitors and their support staff especially in the areas of information technology, communication and medicine. If recommendations and policies made in my tenure were carried out I would hope they would find better computerized record keeping, interoperability in communication and telemedicine and the same high quality medical care that is the hallmark of United States military medicine.

During your tenure as Assistant Secretary for Health at the Department, was the force protection issue an important preoccupation for you, compared to "medical readiness" for the general military population? Answer: Force protection and medical readiness are inextricable and were each equal priority missions.

Were operational commanders dedicated to the task of force protection? Answer: They would need to provide that answer but I believe that while their mission was to win the war, they supported the force health protection agenda.

Can you point to a specific accomplishment during your tenure as Assistant Secretary for Health that made a difference for the troops currently engaged in Operation Enduring Freedom? Answer: Our insistence on pre and post deployment health assessments if carried out in this deployment should provide a clear baseline and outcome record for future health assessments and research.

The VA, DOD and others are spending massive sums through the Research Working Group, .... What are your views on these research efforts – are they worth the investment, or should VA and DOD instead invest more funds in ensuring the protection of future veterans with some of the proposals and initiatives that were discussed in testimony, or that various investigations have documented are still needed? Answer: This research has been carried out according the very best scientific standard including peer review and analysis of revered institutions including the Institute of Medicine. They are therefore



worth the investment as would be any future scientifically based, unbiased proposals that are deemed by an independent committee of reviewers to have research merit.

One of DOD's current forms asks whether the service member has sought or intends to seek mental health treatment. The committee understands that under current DOD regulations, diagnosis of a mental disorder of any kind almost certainly leads to a service member's discharge from the service. What measure should the Department take to correct this problem and allow service members to receive mental health services in a way that does not jeopardize their military careers? Answer: The current policy ensures that major psychiatric pathology like any other disqualifying pathology is detected to ensure the efficiency and protection of the entire fighting force.

Ms. Embrey's statement indicates that the Department of Defense is doing a creditable job in sustaining force protection in those currently deployed overseas. She suggests, however, that veterans of prior deployments would be "best served" by having their post-deployment health problems subjected to medical research – presumably research overseen by VA or the Research Working Group. Do you agree with this policy? Answer: Yes but I believe that is already the case.

Do you sense any inconsistency in DOD policy based on the two positions outlined by Ms. Embrey? Answer: No

Answers submitted by Dr. Sue Bailey, former Assistant Secretary of Defense, Health Affairs, February 19, 2002.

A handwritten signature in black ink that reads "Dr. Sue Bailey" followed by the date "2/19/02". The signature is written in a cursive, flowing style.

VFW's Response to Questions Posed by  
Rep. Jerry Moran, Chairman  
Subcommittee on Health  
Committee on Veterans' Affairs  
February 19, 2002

**Q. Our hearing was focused on "lessons learned." And we gained some understanding of that idea from the testimony given. But there is a human element in addition to the governmental one that needs to be considered to be an effective monitor. Tell me, from your point of view, what lessons did you – particularly representing veterans of the Gulf War – learn over the past 10 years about DOD programs, VA policy and the Government's response to the needs of Gulf War veterans?**

A. Lessons learned from DOD tended to be an extension of our lessons learned from our dealings with DOD on the Agent Orange issue. DOD is slow to acknowledge that any problem exists. DOD answers need to be challenged. We know to look to Congress to pursue the full story.

Congressional and Executive oversight and interest in this issue was instrumental in forcing DOD to deal with the Persian Gulf issue and providing the laws that allowed Persian Gulf veterans to receive treatment and compensation for unique symptoms.

As for the VA, we believe they acted in the best interest of the veteran. They immediately established a registry and recognized a problem well before DOD would admit there were any complications. They implemented Congressional laws (some more narrow than others) and sought information and research sharing agreements with DOD.

**Q. On January 23, 2002, VA Secretary Principi appointed a special panel to advise him of further actions he might need to take in responding to Gulf War veterans' illnesses. What should VA be doing now that is not being done, not necessarily for Gulf veterans, but for any veterans of a future conflict, or for veterans of the conflict that we are engaged in now in Afghanistan?**

A. Unfortunately, for VA to be proactive and identify veterans that may have cause for treatment or benefits they are dependent upon a complete and accurate medical record from DOD. Currently, VA must wait until veterans manifest symptoms, sometimes much later than post-deployment or discharge, and this leaves VA at a disadvantage. In our testimony we point out that we believe that every veteran is entitled to a comprehensive life-long medical record of illnesses and injuries they suffer, the care and inoculations they receive, and their exposure to different hazards. Further, the transfer of this record from DOD to VA should be seamless. Additionally, VA should become the custodian of the veteran's medical record. Outside of a complete record, VA should be ready to employ updated methods of tracking veterans' claims while at the same time conducting statistical analysis to determine if there are associations and assumptions that can be drawn from veterans who deployed to a region and are now reporting similar symptoms or disabilities.

**Q. We learned from the Gulf War experience that some of the most important information on potential chemical agent exposures resided in classified databases at the CIA and the Defense Intelligence Agency, specifically on the Khamisiyah and other facilities. The committee has also been informed that DOD continues to withhold classified information on an even earlier series of chemical and biological exposure incidents, specifically the 1960's-era "Shipboard Hazard and Defense" (SHAD) program, which exposed an unknown number of veterans to hazardous agents. Do you believe that the Department has learned an important lesson that classified information often impacts on the health of veterans? What should be done at least to make such vital information available to VA and veterans affected?**

A. DOD has learned to communicate better with veterans' organizations about their findings and have learned to use us as a conduit for passing information on to our membership. We understand that DOD's culture dictates that the primary objective is accomplishing the mission,

VFW's Response to Questions (contd)  
February 19, 2002

not healthcare. Sick or wounded soldiers are often considered unavoidable losses and DOD's mindset is not geared towards relaying health risks when they "have a war to fight." When questioned, DOD possesses a tendency to "circle the wagons" if it perceives any negative fallout from its previous actions. Utilizing the veil of National Security, they stack the deck of investigation teams with former and current DOD employees without allowing independent reviewers to participate in the research and discovery phase. They then decide what, when, where, and how to release potentially image damaging information (information that is vital to VA and veterans). In other words, their communications are filtered and give the appearance that they are not sharing the whole story whether they are or not. With that in mind we would recommend allowing VA personnel, independent of DOD, who meet security clearance standards, to be part of any DOD investigation relating to the health concerns of soldiers and veterans. Why should DOD be allowed to conduct its own investigations into its problems without independent oversight?