Approved: 2/18/99

Date

MINUTES OF THE HOUSE COMMITTEE ON FEDERAL & STATE AFFAIRS.

The meeting was called to order by Chairperson Representative Susan Wagle at 1:30 P.M. on February 17, 1999 in Room 313-S of the Capitol.

All members were present except:

Reps. Benlon & Franklin, excused

Committee staff present:

Theresa Kiernan, Revisor of Statutes Mary Galligan, Legislative Research Russell Mills, Legislative Research

Conferees appearing before the committee:

Rep. Dan Thimesch

Dr. Lea Steele, Kansas Commission on Veterans

Affairs

Francine Hines, Association of U.S. Army (AUSA) Kenneth Rogers, Gulf War Veterans of Kansas Robert Hays, Persian Gulf Advisory Board Hugh Grossman, individual, Kansas City

Chuck Yunker, American Legion Walter Schumm, KSU Professor

Deborah Rose, RN, Kansas Nurses Association

Dr. Irving Cohen, Topeka

Lt. Col. Joe Rose, Kansas Air National Guard

Others attending:

See attached list

Chair Wagle distributed extended testimony from Conferee Jan Exby on <u>HB 2405</u>, concealed carry. (Attachment #1)

Hearing on <u>HCR 5021</u>, Memorializing federal government and the state of Kansas to continue to research Gulf War illness and to provide benefits, was opened. Rep. Dan Thimesch led testimony. He said he had no idea how serious the Gulf War illnesses were until several years ago. (Attachment #2)

Dr. Lea Steele, Kansas Veterans Commission, gave a brief overview of background studies which have been done on veterans. (Attachment #3) She said 30% of deployed Kansas Gulf War veterans are affected by the Gulf War illness.

Francine Hines, Association of U.S. Army (AUSA) testified in favor of the resolution. (Attachment #4) She testified she did not want Gulf War illnesses to be discounted as had once happened to WW II veterans.

Kenneth Rogers, Gulf War Veterans of Kansas, testified in support of the resolution. He gave his military background experiences and asked the Committee to adopt the resolution. (Attachment #5)

Robert Hays, Persian Gulf Advisory Board, testified he is most concerned about what is not happening for Gulf War veterans. (Attachment #6)

Hugh Grossman, Kansas City veteran, testified in favor of <u>HCR 5021</u>. He gave a history of his medical problems that are attributed to the Gulf War. (Attachment #7)

Chuck Yunker, American Legion, testified that the Federal government delaying and denying ill effects from exposure to radiation from the atom bomb testing was terrible, and he urged the Committee to send a strong message to the President and Congress so that would not happen with the Gulf War illness. (Attachment #8)

Walter Schumm, KSU Professor, gave a summary of an Ohio Desert Storm Research Project study. (Attachment #9)

Lt. Col. Deborah Rose, RN, Kansas State Nurses Association, testified she served in the Persian Gulf and has not been ill from the experience. She testified, however, the long term effects of Gulf War illnesses are yet to be determined. (Attachment #10)

Dr. Irving Cohen, M.D., M.P.H., testified as a physician in favor of the resolution. He said it is difficult to provide any but symptomatic treatment for a disease that is not understood. (Attachment #11) He urged the Committee to support the resolution.

Lt. Col. Joe Rose testified in favor of the resolution on behalf of the troops who were his responsibility. (Attachment #12)

Jeffrey Ford, Desert Storm Assistance Foundation, testified in favor of the resolution. He said the Federal government should do further research. (Attachment #13)

Conferees answered questions from Committee members. Francine Hines said WWII veterans suffered from shell shock and symptoms included deep depression, anger, etc.

Grossman said his wife has four of his symptoms and his children are ill. He thinks the illness is spreading and catching.

Rogers said that vets started to have problems within 12 to 24 hours after returning from the Persian Gulf. Upon his return, his wife started losing her hair due to washing his field gear.

Dr. Steele said that there was a big concern with the Anthrax. Studies are showing that guards are a bit healthier than active and reserves. She said they have very little information on Persian Gulf residents since they do not share health information. England, Canada and Czechoslovakia veterans are also suffering from Gulf War illnesses, but veterans from France are not.

Rep. Mayans made a motion to adopt HCR 5021. Rep. Vining seconded the motion. The motion carried.

Chair Wagle announced the Committee would be working <u>HB 2405</u>, concealed carry, at tomorrow's meeting, and would work the Bingo bill on February 22.

Meeting adjourned at 2:45 P.M.

HOUSE FEDERAL & STATE AFFAIRS GUEST LIST

DATE: _____ 2- /7-99

NAME	REPRESENTING
Inman Jr. High 8th graders	Inman

MEMO

Jan Exby

Safety For Women And Responsible Motherhood, Inc. P.O. Box 12813
Overland Park, KS 66282

DATE:

February 12, 1999

TO:

Susan Wagle - Chairman; Kansas House of Representatives

Federal and State Affairs Committee

FROM:

Jan Exby

SUBJECT:

House Bill No. 2240 - "Personal and Family Protection Act"

Information for Submission:

Feb., 1996 - Lawrence Research Poll: Concealed Carry

Chamber of Commerce Information

Enclosed is additional information which I want to submit to the House Federal and State Affairs Committee. Please review and consider this information in addition to my comments which were presented on Tues. February 9, 1999.

Enclosed:

- (1) 40 copies of a <u>Kansas survey</u> conducted by <u>Lawrence Research</u>, in Santa Ana, California. We called to verify that they did, indeed, do the poll in 1996. Please note the results which are circled. It will be helpful to compare the wording of the questions of this survey with the wording of the Kansas State Univ. survey. I believe you will find that the wording of the Lawrence Research survey <u>most accurately</u> reflects the legislation which is being proposed.
- (2) Over the last 2 years, Safety For Women And Responsible Motherhood, Inc. sent questionnaires to chambers of commerce in states which have similar laws to that being proposed in Kansas. The intent was to determine general results of the effect on business of these laws. Summaries of the returned questionnaires is attached along with copies of the questionnaire.
- (3) Copies of my summary statement to the Senate Federal and State Affairs Committee submitted in 1997, summarizing telephone interviews with several chambers of commerce and their response to their state's law and effect on business.

Any questions on this information can be directed to me at either my work number, 816-559-1402, or after hours at 913-648-2660. Thank you.

lan Exby

Safety For Women And Responsible Motherhood, Inc.

House Fed + State Attachment #/1/ 2-17-99

RCH 19, 1997 SUMMARY OF COMMENTS RECEIVED FROM CHAMBERS OF COMMERCE IN OTHER STATES REGARDING THEIR CONCEALED FIREARMS LAWS

Over the last several months, we have called and visited with individuals from several chambers of commerce. The brevity of this report is illustrative of the <u>absence</u> of concerns and problems related to us in these conversations.

In good faith, we will continue to call and visit with chambers in states which have right to carry laws in place, for additional input. Based on the similarity of comments from those we've talked with so far, I don't recommend that you hold your breath while waiting for significantly different results. These comments mirror the reality of a significant lack of problems and crimes by permit holders as reported by the states.

Chambers contacted:

- Phoenix, AZ Chamber of Commerce
- Oklahoma City, OK Chamber of Commerce
- Dallas, TX Chamber of Commerce
- · Salem, OR Chamber of Commerce
- Little Rock, AK Chamber of Commerce

The overall consensus expressed by the chambers is that <u>their concealed carry laws have</u> been a 'non-issue'.

A business reporter for the KC Star called the <u>Florida Chamber of Commerce</u> and was told that the law hasn't affected businesses one way or the other. As he told my husband, the law has been a 'non-issue' for businesses. The individuals we talked with were spokespersons for the chambers and/or handled chamber matters related to legislative issues and public policy. We asked the following about their laws:

Has your law had any negative effects on business? -- No, not an issue
Have there been firearm related crimes committed by permit holders in any businesses
that you know of? -- Couldn't think of any
Do businesses coming into the area ask about the law? -- No
Has your law interfered with business growth? -- Not an issue

Of particular note in our conversations was the lack of problems related, there were no expressions of alarm or concern, just the reiteration that the law is not causing any problems and just "has not been a significant issue at all."

The issue is so insignificant that most really didn't know how long their law had been in place and had not had anyone call and ask questions like we were doing. Businesses were setting their own policies on how, if at all, to regulate permit holders carrying their firearms on their premises.

On just a slightly different sidenote, two law enforcement personnel from Texas related to my husband while they were all at a week long defensive firearms training course out of state, that one business in Texas (a TV station) had set aside 20-30 minutes of airtime to cover all the incidents they were sure would happen the first day that permits were being issued in Texas. Needless to say, they were faced with nothing but empty airtime then, and since, on ill effects from the law.

Jan Exby Safety For Women And Responsible Motherhood, Inc.

1-2

PERSONALICONFIDENTIAL

N = 500 Registered Voters

Kansas

		Project#6608
	N. Tustin Avenue, Sulta 150 Ana, California 92701	Time Started
ana	Aria, Canidinia 92701	Time Ended
ield [Dates: February 6-7, 1996	
lello,	l'm of Lawr	ence Research, a national research firm. We're conducting
		ke to ask you a few short questions. (AS NECEBBARY:
		pinion poli. It will take about three minutes.)
	Ann	
L .	honzepold who is tedistered to so	TES, BEGIN; IF NO, ASK:) Is there anyone else in your ta? (IF YES:) May I please speak with him or her?
Our flr	st question is about the upcoming	U.S. Senete race
1.	If the election for U.S. Senator wen Republican or Sally Thempson, D.	a hald loday, would you vote for (ROTATE) Pat Roberts,
		Pat Roberts
•		Sally Thompson 23
		[UNDEOIDED] 35
na nc	other topic	
Σ.	Do you feel that people should or criminal acts within their own home	should not have the right to defend themselves against use?
		Ct
		Should
	•	Bhould not 2
	•	
1.	Do you feel that people should or criminal acts outside their homes?	Bhould not
1.		Bhould not
i.		Should not
l.		Bhould not
	criminal acts <u>outside</u> their homes	Should not
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	criminal acts <u>outside</u> their homes' Would you tavor or oppose a law a	Should not
	criminal acts <u>outside</u> their homes' Would you tavor or oppose a law a	Bhould not
	Would you tavor or oppose a law a a firearm for personal protection of	Bhould not
5.	Would you tavor or oppose a law a a firearm for personal protection of	Bhould not
	Would you tavor or oppose a law a a firearm for personal protection of	Bhould not

₫.	Are you registered to vote as a Republican, a Democrat, or something else?	Republican 47 Democrat 28 Independent/Other 27 [REFUSED]
7.	ls the occupation of the head of your household professional, white collar, blue collar, fettred or unemployed?	Professional 30 White collar 14 Blue collar 24 Retired 27 Unemployed 27 [REFUSED]
8.	And what is your age, please?	18 - 24 7 25 - 34 18 36 - 44 22 45 - 54 17 55 - 64 14 65 + 22 [REFUSED] 2
9. ·	Sex	Male
10.	POST CODE: COUNTY FIPS CODE	
That	completes our interview. Thank you for talkil	ng with us today,
	PHONE:/	
quest	RVIEWER CERTIFICATION: I have re-read to the substitutions requiring answers have been appropriated the formula individual designated.	his completed questionnaire and certify that all ately filted in and that this interview has been
INTE	RVIEWER	DATE
		ence Research. Any attempt to duplicate or sell

the contents constitutes an Megal act and is subject to prosecution

1-14

SURVEY RESULTS: "RIGHT-TO-CARRY LAWS"

ik = Unknown)

Safety For Women And Responsible Motherhood, Inc. - Overland Park, Kansas

STATE/CHAMBER	RESPONSES TO QUESTIONS 1-12 ON QUESTIONNAIRE												
	1	2	3	4	5	6	7	8	9	10	11	12	Date Comple.
ALASKA			100000					lina de la					(Chamber comments,
Anchorage Chamber			A BOTTO PROPERTY OF THE		No Pos.								12/12/97 - don't have enough info. to complete
ARIZONA													
Flagstaff Chamber of Commerce	Unk	Unk	Unk	Unk	Neutral	Not a Problem	No Signs	Unk	Unk	Unk	No		12/1/97
Tucson Metro Chamber of Comm.	No	No	No	Unk	Neutral	Not a Problem	Signs	Unk	Unk	Not a Factor	No	10+	12/3/97
IDAHO													
Boise Area Chamber of Commerce	No	No	No	N/A	Neutral	Not a Problem	N/A	Unk	Unk	Not a Factor	N/A	N/A	11/25/97
INDIANA													
Greater Bloomington Chamber	No	No	No	No	Neutral	Not a Problem	No Signs	Unk	Unk	Not a Factor	No	Unk	12/22/97
MAINE													
Bunyon Region Chamber	No	No	No	Unk	Neutral	Not a Problem	No Signs	Unk	Unk	Not a Factor	No	Unk	11/24/97 Approx.
MISSISSIPPI									建		the state		
Jackson County Chamber	No	No	No		Neutral	Not a Problem	Signs	No	Prohibit	Not a Factor	No		12/3/97 Approx.
MONTANA								Fig. 1					
Bozeman	No	No	No	Unk	Neutral	Not a Problem	No Signs	Unk	Unk	Not a Factor			12/10/97
Great Falls Area Chamber	No	No	No	Unk	Neutral	Not a Problem	No Signs	Unk	Unk	Not a Factor	No	10+	12/2/97
OKLAHOMA													
Tulsa	No	No	No	Unk	Neutral	Not a Problem	Signs	Unk	Prohibit	Not a Factor	No	0-2	5/9/98
OREGON		Partners											
La Grande-Union County	No	No	No	No	Neutral	Not a Problem	No Signs	Unk	Unk	Not a Factor	?	?	5/12/98 complete non-issue & has never come
TEXAS										计 程序 第二十二			
Abilene	No	No	No	No	Neutral	Not a Problem	Signs	Unk	Prohibit	Not a Factor	No	0-2	5/15/98
Galveston	No	No	No	No	Neutral	Not a Problem	Signs	Unk	Prohibit	Not a Factor	No	0-2	5/15/98
UTAH													
Provo	No	No	No	No	Neutral	Not a Problem	No Signs	Yes	No Reg.	Positive	No	3-5	5/15/98
VIRGINIA													
Richmond (Central Virginia)	No	No	No	No	Opposed	Opposed	No Signs	No	Unk	Negative	No	3-5	5/98
WASHINGTON													
Olympia	No	No	No		Neutral			Unk	Unk	Not a Factor			5/13/98
Seattle (Greenwood-Phinney)	No	No	No	Unk	Neutral	Not a Problem	No Signs	No	Unk	Not a Factor	No	Unk	5/14/98
WEST VIRGINIA													
Lewisburg (Greater Greenbrier	No	No	No	Unk	Neutral	Not a Problem	No Signs	No	Prohibit	Not a Factor	Unk	Unk	5/13/98
ATE /CHAMBER not listed on returned form)	No	No	No	No	Neutral	Not a Problem	Signs	Unk	Unk	Not a Factor	No	0-2	

5-12

RVEY: GENERAL EF S OF LAWS WHICH PERMIT CITIZE OF CARRY FIREARMS FOR SELF DEFENSE, (RIGHT-TO-CARRY LAWS) UPON BUSINESSES AND THE GENERAL BUSINESS CLIMATE.

		YES	NO
1.	Do most businesses considering locating in your area ask about this law and its effect on business?		1528
2.	To your knowledge, has your right-to-carry law been a detriment in attracting new business?		
3.	To your knowledge, have any businesses left because of this law? (If yes, please give details on back of form)		
4.	Has any individual with a legal permit, been convicted of using a firearm during a crime at a business? (If yes, please briefly explain on back of form)		

5. Prior to passage of your law, which of the following was the position of your chamber:					
Opposed In Favor Neutral, or No Position Taken					
6. How does your chamber currently view your right-to-carry law:					
Opposed In Favor Not an Issue or a Problem					
7. How do most of your retail businesses regulate the carrying of firearms by customers?					
Signs Prohibiting No Signs Prohibit - Signs and Metal Detectors at Doors					
8. Has any retail business decided to remove signs which prohibit carrying of firearms?					
Yes No Unknown					
9. How do most of your non-retail businesses regulate the carrying of firearms by employees?					
Prohibit by company policy No regulation Unknown					
10. Overall, how would you describe the effect of your right-to-carry law on the health and growth of business in your area?					
Not a Factor Negative factor Positive Factor					
11. Is the city or county covered by your chamber, exempted from the state right-to-carry law?					
No Yes					
12. Approximately how long has your state's right-to-carry law been in effect?					
0-2 years 3-5 years 5-9 years 10+ years					
Chamber: Phone:					
Signature of person completing survey:					
Printed Name: Date:					

/-6 S.W.A.R.M. OPKS

DAN THIMESCH

REPRESENTATIVE 93RD DISTRICT 30121 WEST 63RD STREET SOUTH CHENEY, KANSAS 67025 (316) 531-2995

STATE CAPITOL **ROOM 278-W** TOPEKA, KANSAS 66612-1504 (785) 296-7680 1-800-432-3924 (DURING SESSION)



COMMITTEE ASSIGNMENTS

AGRICUL TURF EDUCATION TRANSPORTATION ECONOMIC DEVELOPMENT CHAIRMAN: SOUTH/CENTRAL/SEDGWICK COUNTY DELEGATION GULF WAR ADVISORY BOARD

HOUSE OF REPRESENTATIVES

TESTIMONY BEFORE THE HOUSE FEDERAL AND STATE AFFAIRS COMMITTEE

Wednesday, February 17, 1999

HCR 5021 Memorializing federal government and the state of Kansas to continue to research Gulf War illness and to provide benefits.

Thank you Chairman Wagle and committee members for allowing me the opportunity to come and testify before you today.

It is after much work implementing the bill we all passed two years ago HB 2108, that I am here asking for your support of HCR 5021. The purpose of HB 2108 was to develop a comprehensive survey. (To identify how big a problem we have in Kansas with Gulf War illness.) HRC 5021 gives the results of that survey.

I testified two years ago before this committee on HB 2108. I wasn't sure that this survey would show anything wrong with our veterans. I promised legislators that I would be the first to apologize if our study did not show a problem. I do not have to apologize to anyone. We do have a serious problem in Kansas with Gulf War illness. Preliminary findings indicate that the Department of Defense, the Pentagon, and the Veterans Administration have turned their back on our veterans and their families. Our veterans are frustrated with the process. Our federal government should be taking care of this problem and they aren't. If we don't help, no one else will either. Our Kansas men and women served honorably, and did what was asked of them.

I appreciate your support in the past and I urge your help in the future. Our Kansas men and women that served in our military during the Gulf War now deserve our help and support.

Please pass out favorably HCR 5021.

Thank you. Daniel Thimesch

Rep. Daniel Thimesch

Dr Lea Steele, an epidemiologist, from the Kansas Commission on Veterans Affairs, will explain her findings to you.

House Fed & State
Attachment #2
2-17-99



Testimony of Lea Steele, Ph.D. Regarding House Concurrent Resolution No. 5021 before The House Committee on Federal and State Affairs February 17th, 1999

Good afternoon, Madame Chairman and members of the committee. My name is Dr. Lea Steele. I am an epidemiologist, and for the past year and a half I have coordinated the Kansas Persian Gulf War Veterans Health Initiative Project for the Kansas Commission on Veterans Affairs. We are currently wrapping up the first phase of data analysis for the study conducted over the past year, The Kansas Gulf War Veterans Health Study. After analyzing data from over 2000 veterans, I am in a position to tell you that Kansas veterans are suffering from very real health problems that appear to be connected to their service in the Persian Gulf War. These problems range from the moderately problematic to the very serious. They are complex and they are widespread.

Many of the preliminary findings of the study are contained in the resolution before you today. My purpose here is to provide you with a brief summary of that information and to answer any questions you may have about the study or the program.

By way of background, let me say that reports of unexplained illnesses in Gulf War veterans have been around since the war wound down in 1991. In those eight years, the federal government has spent millions of dollars to find out why Gulf War veterans are ill, but has not provided answers to even the most basic questions. For example, we do not know--on a national level--how many veterans are ill, much less how to diagnose or treat these problems. We all recognize that it is the federal government's responsibility to take care of veterans whose health problems result from their military service. Unfortunately, federal programs tasked with providing healthcare, disability compensation, and research into these conditions have fallen short.

The Kansas Gulf War Veterans Health Study provides important information not yet identified in federal reports. Preliminary results indicate the following:

- 30% of Kansas Gulf War veterans are affected by "Gulf War Illness," a symptom complex characterized by fatigue, joint and muscle pain, and cognitive problems, and a variable array of respiratory, gastrointestinal, neurological, skin, and auditory problems.
- Gulf War Illness occurs at an increased rate among veterans who did not deploy to the Gulf War, but received vaccines during that period.
- Children of Gulf War veterans may also be affected.
 Children of Gulf War veterans born since the war were significantly more likely to have been born with health problems, including birth defects, than children born to nondeployed veterans.
- Kansas Gulf War veterans receive VA disability compensation at a significantly lower rate than veterans of the same period who did not deploy to the war.
- Gulf War Illness occurs in identifiable patterns.

 GWI affects Army veterans more than those in other branches, and enlisted personnel more than officers. Veterans who served on board ship are least affected, with intermediate rates among those deployed to Saudi Arabia, and highest rates among those who were in Iraq or Kuwait.

House Fed + State Attachment #3-2-17-99

HB 2108

• Directed Missions:

- Establish a board to be advisory to the commission in the implementation of the act.
- Within 90 days of the act appoint all members of the board; Fill authorized FTE.
- Within 120 days Develop comprehensive surveys, or adopt one or more existing surveys
- Administer survey(s) and review results with the board.
- Utilize different media to publicize information on the surveys.
- Coordinate with KDHE to contact families with children on any state birth defect list.



HB 2108

• <u>Directed Missions (cont.)</u>

- Establish and maintain a Persian Gulf War Registry.
- Inform veterans of any state and federal programs that meet their needs.
- Subject to funds available, conduct a fiscal impact study.

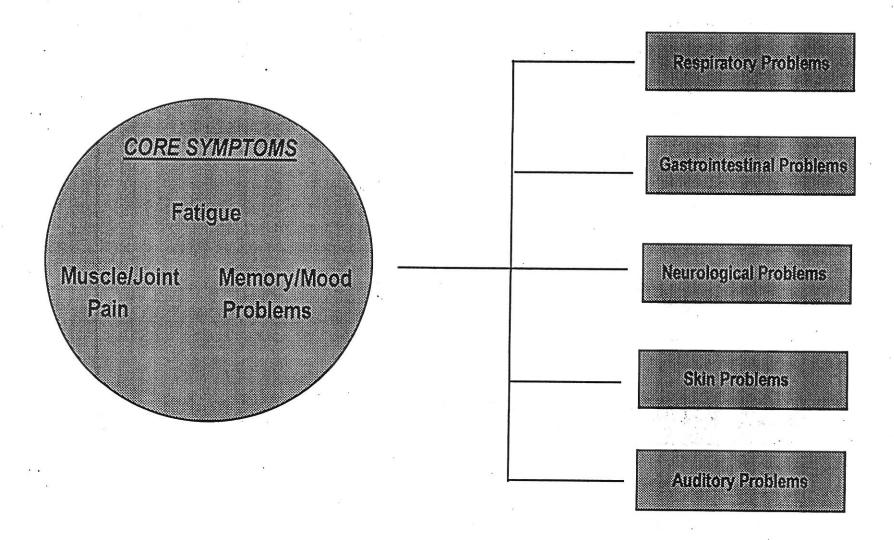


HB 2108

• Implied Missions:

- Coordinate all efforts with appropriate private, state, and federal agencies.
- Provide recommendations to the state legislature on future requirements.
- Secure outside (non- SGF) funding for continued operation of the program.
- Respect individual privacy in all activities.
- Prioritize requirements.
- Accomplish missions in the most professional, effective and efficient manner possible.

WHAT IS GULF WAR ILLNESS?: Core Symptoms + 1 or More Additional Problems





Recommendations of the Kansas Persian Gulf War Veterans Health Initiative Advisory Board

 Urge Federal Officials to Improve Gulf War Veterans Research, Healthcare, and Benefits Programs.

Continue state government efforts that urge and support major changes in federal policies regarding Gulf War veterans health issues and programs. Such efforts might include a state resolution in support of Kansas Gulf War veterans, briefing federal legislators and committees on pressing issues and the results of the Kansas Gulf Veterans Health Study, and requesting that members of the Kansas Congressional delegation introduce legislation that would provide funding to state or other independent research efforts on behalf of Gulf War veterans. Study results and conclusions should also be provided to officials at the U.S. Departments of Defense and Veterans Affairs, in Washington, D.C. and in Kansas.

2. Continue the Research Component of the Kansas Persian Gulf War Veterans Health Initiative Several areas of concern identified in the Kansas Gulf War Veterans Health Study require follow-up and clarification. These include: large differences in illness rates observed in specific units, possible effects of vaccines, birth

defects and other health problems in veterans' children, and association of Gulf War Illness with individual exposures.

If funding sources can be identified, we also suggest expanding research efforts into areas of particular importance, for which the Kansas program is well-suited. Such areas might include: clinical and diagnostic testing for Gulf War Illness, mortality among Gulf War veterans since the war, and longitudinal follow-up to assess the prognosis of Gulf War-related conditions.

3. Continue the Service Component of the Kansas Persian Gulf War Veterans Health Initiative

Among the pressing needs identified in the course of this project is the need expressed by veterans and family members for current and credible information on health problems and risks, and available government programs and services. The Board urges continuation of the Kansas Gulf Veterans Information Network, which provides this information to veterans through a variety of outreach mechanisms.

The Board also urges the development of a plan to improve procedures used by KCVA's veterans service representatives for filing Persian Gulf War veterans' disability claims for undiagnosed illnesses. Although specifically provided for by law, fewer than 10% of these claims are granted in Kansas or nationwide.

4. Seek Program Funding Support from All Available Sources.

It is hoped that the results of the Kansas Gulf War Veterans Health Survey will provide strong evidence that will persuade both federal and private funding agencies of the need for continued independent research efforts on behalf of Gulf War veterans. The Board urges a concentrated effort by KCVA staff to seek funding from any available and appropriate sources — public and private — to support any or all of the activities of the Kansas Persian Gulf War Veterans Health Initiative.

NOTE: State funding was initially allocated to the program as "seed money", with the understanding that continued support would be obtained through federal grants then available for Gulf War health research. Unfortunately, no such federal grants were available when the Kansas program began in July 1997, nor since that time. Further, private foundations that support health research traditionally do not fund veterans' programs, which are perceived to be adequately funded by the federal government.





ASSOCIATION OF THE UNITED STATES ARMY

STATE OF KANSAS

Madam Chairman, Members of the Committee,

Thank you for giving me the opportunity to appear before you.

President: Francine M. Hines

Board of Governors

Honorary Chair: Merrill Werts

CW2 Rosanna Archuleta

Dallas W. Freeborn
Douglas K. Jernigan, D.V.M.
LTC David H. McElreath
LTC (Ret) Ronald F. Nicholl
COL Dennis Parry
CSM Warren Smith

On February 17, 1997, I addressed the Committee chaired by Representative Gary Boston to express my personal support and that of the Association of the United States Army for then HB 2108, relating to the Persian Gulf Syndrome affecting our veterans and their families.

Again, in March 1998, on behalf of AUSA, I expressed the same support of the Persian Gulf War Health Initiative Program.

Today, I am here to ask you to consider House Concurrent Resolution No. 5021 as the key to the research that cannot continue unless proper funding is provided. Much progress has been made these past two years but it is only the beginning. I know you are aware of the issues surrounding the unexplained illnesses reported by our veterans since their return from Desert Storm.

I urge you, respectfully, to take action and support in the strongest fashion House Concurrent Resolution No. 5021.

My thanks to each of you for your interest and your commitment

February 17, 1999

STATEMENT BY FRANCINE M. HINES

House Fed + State
Attachment #4
2-17-99

Comments to the Kansas Federal and State Affairs Committee Hearing On

House Concurrent Resolution No. 5021

February 17, 1999

Good afternoon,

Ladies and gentlemen, my name is Kenneth L. Rogers, Sr. I am a veteran, with over 25 years of service to this country and I am 100% disabled due to serving in the Persian Gulf. I served in Saudi Arabia, Iraq, and Kuwait from December, 1990 through the end of April, 1991, and I was assigned to 1st Bde, 3d Armor Div, VII Corps, S2, Command Section (Intelligence), for the 1st Bde. Headquarters Command, as a "Flank Guard" for the TOC (Tactical Operations Center), during all movements of the 1st Bde. Command Headquarters. I was there for the complete movement phase of Operation Desert Shield and participated in the preparation and execution of Operation Desert Storm.

During the Operation Desert Shield phases, we were subjected to SCUD attacks in our staging areas east of KKMC (King Khalid Military City), from late January into February, 1991. Our chemical alarms did go off on numerous occasions, not only in our area, but at KKMC and outer area commands.

When we crossed the line of embarkation into Iraq on February 24, 1991, at the beginning of the Ground War, my crew and I spent the next 100 plus hours in and out of our vehicle, digging temporary fighting positions, and scouting our flank positions for enemy ground forces.

All of this was as normal as any field exercise I had ever been involved with; you moved forward, found the enemy, fired on their positions, destroyed the enemy and their equipment, and then moved forward again sounds simple, it was, no fuss no muss.

House Fed + State Attachment #5-1 2-17-99 There was something that happened out in the desert during those (6) six months that I served in the Gulf, and I am still waiting for the true answers from our federal government as to what really did happen to us.

The tens of thousands of us veterans who became sick after leaving the desert, are still sick today, and are still left with no answers from our government as to why.

It will be (8) eight years this next Wednesday, the 24th of February since the start of the Ground War. I have been suffering with a multitude of medical and physical problems that just won't go away, and things that are wrong with me I would not wish on my worst enemy.

I would like to share with you a few of these afflictions:

Memory Loss
Chronic Fatigue
Weight Gain
Lower Extremity Dysfunction
Chemical Burns to both feet and ankles (from unknown agents)
Cervical and Lumbar Spondylosis
Bilateral Carpal Tunnel (Both wrists)
Peripheral Neuropathy of Lower extremities
Pityrosporon Folliculitis
Cervical Spine and Degenerative Joint Disease
Gastrointestinal Disorders
Sweating (Day and Night)
Bleeding Gums and Sinuses

These medically defined problems that I have mentioned are some of the major problems that I suffer from daily. These infirmities, coupled with irritability and lethargy, constantly affect my everyday well being. I find it hard to perform menial household chores without effort. What would take the average person a reasonable amount of time to complete, it takes me almost (3) three times as long. My patience toward my family, especially my younger son, is very limited.



Although I take medications (3) times a day to control these symptoms, my overall physical afflictions continually affect my normal routine as they have for the past (7) seven plus years. I hate living like this, ladies and gentlemen, and I am still waiting for the truth!

I want something done to help all veterans who are suffering like myself. A lot of the veterans are in worse shape, in fact quite a few are dying or have died from this mystery that plagues us. I believe we all deserve to know the truth about what has affected our lives for so long!

I have come here today, ladies and gentlemen in support of the House Concurrent Resolution # 5021. It's a start, but I have some reservations as to what will transpire if or when this Resolution is in place.

We in the Gulf War Veterans groups have found through our research groups that we need some special testing done, for all veterans who were in the Gulf during the war and afterwards. For undetermined reasons, the government and the VA seem to be stalling this testing, which I feel is important to our general health.

These are some of the important ones that come to mind;

- o Depleted Uranium (DU) poisoning testing
- o Adjuvants contained in the shots we were given for duty in Southwest Asia
- o Brain Scans for irregular brain patterns, i.e., SPEC Scans; CAT Scans, and MRIs
- o DNA Testing of normal and contaminated T-Cells

Plus we have serious health concerns in alterations involving the immune system, respiratory tract, gastrointestinal, and severe problems of the renal and geneto-urinary system.

We were infected with a combination of chemical and Bio-chemical agents, to include the military shots and PB Tablets (pyridostigmine bromide) that we were given and ordered to take, and other things like the oil well fires, vehicle fuels, pesticides, et al.

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Numerous problems that have affected most all Gulf veterans are too similar to be called a coincidence!

Ladies and gentlemen, I am in an age group of veterans in which some of these medical problems can occur with age, however I have seen and talked to a lot of young veterans who are in their 20s and 30s that shouldn't be going through any of these things so early in their lives, Many young veterans are dead or are dying due to improper/untimely medical care given by the military and VA, Of course some have died by their own hands, and others by accidents, but this does not detract from the fact that a large group of young men and women have died, who were all at one time or another in the same place - The Persian Gulf.

Ladies and gentlemen, I respect what you are doing here today for the veterans. I hope that Resolution #5021 gets passed by both Houses and is endorsed by Governor Graves and that something positive does come of it, however if special testing is not done, you are going to see a lot more young veterans die before their time.

I would like to thank you for the time you have given me here today. If anyone has any questions I will do my best to answer them. Again, I want to thank you, on behalf of all Kansas veterans, for your concerns about our continuous health problems, and their effects it has had on our families and in our lives.

God Bless you all, and Thank You.....

Persian Gulf War Veterans Information & Referral Center "Fighting For The Truth"

URL: http://www.idir.net/~krogers/

E-mail: krogers@idir.net

Kenneth L. Rogers, Sr. 34583 - 170th Street Leavenworth, Kansas 66048-8492 (913) 682-2257



2/17/99

I have treated combat zone veterans for the Veterans Administration since 1982 when I was asked to set up the inpatient program here at the Topeka V.A. In 1989, I simultaneously began private practice and set up the program for combat zone veterans at the Kansas City V.A. Medical Center. My professional experience is full and extensive in dealing with all veterans of our wars. As a Vietnam veteran myself, I am most concerned with what has not been happening for our brothers and sisters from the Gulf war. I do not like the echoes I am hearing.

The Survey data reveals shocking conclusions. In my experience, both personal and professional, the most difficult problems veterans encounter are those which stem from struggling with serious to life threatening medical problems- to which the study speaks most unabashedly. Severe depression is the typical- but not singular outcome that clouds like a miasma any joy in life. The impingement of family and social relationships is- at times for these veterans- as life threatening as the diagnosed-or undiagnosed illness itself.

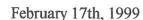
This impingement itself strains and tears at the fabric of bonds within the family –and within the self. It destroys hope because there is no promise of a better tomorrow. As many of you may know, when hope is unseeable, faith dies and the soul withers away.

This study is the beginning to providing hope for the Gulf survivor. Knowledge is power and power gives a sense of control. However this Survey is only that. The knowledge that someone is listening and choses to try to help is a medicine of its own. We must continue on the path and begin to provide real resources for our veterans.

Your grandfathers, sons, daughters, and some of your peers here today have served when their country called. Let us then, here in the state and home towns of our Kansas Persian Gulf War veterans, continue to seek understanding and provide appropriate services for these men, women and their children in the attermath of their service.

Robert W. Haya M.S. L. R.C.

House Fed + State Attachment #6 2-17-99



My name is Hugh J. Grossman III. I served two tours of duty in Vietnam and one tour in Thailand back in the late 60's and early 70's. I rejoined the Army Reserves in 1985. I was called up for Operation Desert Shield/Storm from December 1990 to June 1991. I started becoming ill in 1992 and later was medically retired from my position as a Police Sergeant with the Spring Hill Police Department in Jan 0f 1997. I have been off work for the past 25 months.

My experience has been devastating to me personally and my family. I have been diagnosed with Chronic Fatigue Syndrome; Fibromyalgia; Post Traumatic Stress Disorder and the latest is Skin Cancer. These disorders have effected my family physically; financially and emotionally. My wife who enjoys 4 or 5 symptoms I do is now working two different jobs. My stepchildren have had trouble physically. I lost my family medical insurance after I was retired. My only source of medical help is from the VA.

I go to the Leavenworth VA. It is 88 miles round trip. The regular Doctor that I see is constantly double booked. He told me his patient load went from 800 to 1500 patients. He is only allotted two half-days per week. The Leavenworth VA went from 150 beds to 30. I understand Topeka is not much better. The VA system in Kansas City and Columbia and St. Louis recently had an overwhelmingly vote of no confidence against the regional director and they are losing Doctors. It is frustrating for them and hurts the veterans who need the help. My experience has been that the VA is only "tracking" the Gulf War vets. They are not trying to treat us or find out why we are ill. They are also dragging their feet on veteran claims. Why should the VA be any different when the Department of Defense is not telling the truth about what happened to us. The government and the Department of Defense and the VA, really don't give a damn about us. If they did they would not treat veterans this way.

I wish I were not sick. I wish I could go back to my old job. I wish my family was not sick. I wish my wife didn't have to work two jobs. I don't know what to do.

I do want to thank Representative Thimesch for inviting me to speak today. I hope with the statistics you've gathered will help all Gulf War Veterans.

Sincerely;

Hugh J. Grossman III P.O. Box 154 20865 Walker Road Spring Hill, Kansas 66083-0154 (913) 592-2868

House Fed & State
HHachment ##9
2-17-99

TESTIMONY IN SUPPORT OF HCR5021 PRESENTED TO HOUSE FEDERAL AND STATE AFFAIRS BY CHARLES M. YUNKER, DEPT. ADJUTANT KANSAS AMERICAN LEGION FEBRUARY 17, 1999

Thank you for allowing me this opportunity to testify in favor of House Concurrent Resolution 5021. My name is Charles Yunker and I serve as Adjutant for the Kansas American Legion.

Shortly after World War II and throughout the fifties, sixties, seventies and into the eighties The American Legion urged our Federal government to investigate and treat those members of the Armed Forces adversely effected by their exposure to radiation during atomic bomb testing. At almost every juncture the Federal Government, to include the Armed Forces, Congress and the Veterans Administration, delayed and denied any ill effects as the result of such exposure. until after thousands of veterans died of various cancers without compensation or treatment from the government thus having to rely upon their private funds and insurance.

During and after the Vietnam War the Department of Defense choose to ignore health warnings regarding its use of chemical defoliants. fact the U.S. Army claimed it could not track our troop movements and areas where Agent Orange had been sprayed prior to those movements. The American Legion then funded a private study by Columbia University to prove or disprove any ill effects of such spraying. One of the first and easiest discoveries made by that study was a 'hand-in-glove' pattern directly correlating spraying followed by
House Fed + State
A Huchment #8-1

troop movements into the same areas within days. The Columbia study also found direct evidence of several cancers and nerve damage suffered by Vietnam veterans as a result of their exposure to defoliants. Yet the Center for Disease Control and various federal agencies continued their denial of any connection. On three separate occasions the Center for Disease Control received Congressional funding for specific cancer research related to exposed Vietnam Veterans however CDC used those funds to research other cancers of more interest to CDC.

The American Legion then filed suit in Federal Court over this misappropriation of funds and various other factors regarding the government's denial of treatment for many veterans because the VA had not yet recognized their symptoms as Agent Orange related.

Although the Legion's suit was eventually dismissed, the message was received and the VA began treatment and compensation for more ill effects including children of veterans born with spina bifida whose fathers were exposed to Agent Orange.

My reason for providing you with a brief history of the Federal Government's refusal to acknowledge, identify and treat veterans exposed to radiation and defoliants is to ask you to send Congress and the President a message. The pattern of ignoring veteran's concerns for their health should not continue. If our troops were exposed to something, or things, in the Persian Gulf which adversely

effected their health in the long or short term they and their families have a right to know and should be treated—not studied. I personally know two such veterans, one in Kansas and one in Washington, D.C., both of whom endured the same symptoms after serving in the Gulf War. One appears to have recovered, the other still has occasional bouts of his problems. Both wonder about their future health and one is afraid to father any children.

I hope you will agree that those who served this nation so well in the Gulf War deserve answers through your support of HCR 5021.

Summary of Presentation

OHIO DESERT STORM RESEARCH PROJECT:

Overall Self-Reported Health as a Function of Gender and Mobilization Status

by

Walter R. Schumm, Ph.D.

Project Director and Professor School of Family Studies and Human Services College of Human Ecology Kansas State University

and

Kansas Emergency Preparedness Liaison Officer Colonel, Military Police United States Army Reserve

For

Hearing
House Concurrent Resolution No. 5021
Federal and State Affairs Committee
State Capitol Building, Room 313-S

February 17, 1999

House ted + State
Attachment#9-1
2-17-99

Background

In 1996-1997, surveys were mailed to National Guard and Reserve personnel who had been in the military as of August 1990 and had been residents of Ohio in either 1990 or 1996. Over 1,000 personnel returned surveys. This survey was funded by the state of Ohio with the support of the governor and legislature of Ohio. Data were collected by Kansas State University under the sponsorship of the Center for the Study of Veterans in Society, based in Cincinnati.

Analysis

Veterans described their health as "poor" (1), "fair" (2), "good" (3), "very good" (4), or "excellent" (5) at five times:

Before Desert Storm (before August 1990)[1990]
During Desert Storm (August 1990/June 1991)[1991]
After Desert Storm (July 1991/June 1995)[1993]
During the Past Year [1996]
During the Past Month [Now]

[as labeled on charts that follow]

An analysis of variance with repeated measures over time was performed to assess the apparent impact of gender and mobilization status on changes in self-reported general health over time. Age of veteran was controlled as a statistical covariate.



Mobilization status included veterans who:

Never mobilized [NONMOB]

Mobilized but remained in the U.S. [MOBUSA]

Deployed overseas but not to the Gulf [MOB OVERSEAS]

Deployed to the Gulf [GULFMOB]

[As labeled on charts that follow]

Results

- 1. Overall, men and women reported similar perceived health status.
- 2. Overall, those not mobilized reported better perceived health than those mobilized. (p < .001)
- 3. While overall perceived health for men and women was similar, women who did not go to the Gulf generally reported better health than men while women who went to the Gulf generally reported worse health than men (who went to the Gulf)(p < .05)
 - 4. Age did not affect the outcome of the analysis.
- 5. For all veterans, perceived health deteriorated from 1990 to 1996/1997. (p < .001).
- 6. Perceived health did not deteriorate, on average, more over time for women than for men.

- 7. Perceived health did deteriorate more over time, on average, for those mobilized (especially those sent to the Gulf) than for those not mobilized. (p < .001)
- 8. There was a statistical trend (p < .08) for the perceived health of mobilized women to deteriorate more over time than it did for men.

The exact average perceived health scores for each group were as follows:

TABLE 1. FOR WOMEN:

GROUP

	NONMOB	MOBUSA	OVERSEAS	GULF
1990	4.25	4.65	5.00	4.41
1991	4.20	4.42	4.80	3.41
1993	4.15	3.88	4.20	2.92
1996	3.85	3.73	3.80	2.86
Now	3.84	3.65	3.60	2.97

TABLE 2. FOR MEN:

GROUP

	NONMOB	MOBUSA	OVERSEAS	GULF
1990	4.34	4.24	3.92	4.36
1991	4.29	4.21	3.92	3.80
1993	4.13	3.98	3.77	3.24
1996	3.99	3.67	3.38	3.07
Now	3.94	3.64	3.23	3.05

9-4

CHARTS

CHART 1. WOMEN'S PERCEIVED HEALTH

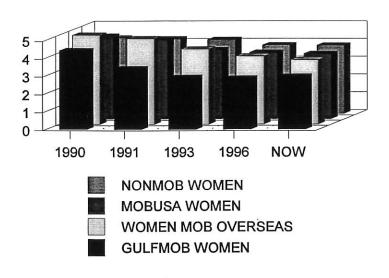
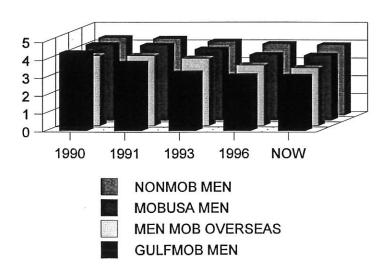


CHART 2. MEN'S PERCEIVED HEALTH



Conclusions:

- 1. While perceived health deteriorated over time for all veterans, it appeared to deteriorate more over time for mobilized/deployed veterans than for those who were not mobilized.
- 2. Deterioration over time in perceived health appeared to be greater for Gulf veterans than for those not deployed to the Gulf, an effect that was possibly greater for women (p < .08).
- 3. The sharpest decline in perceived health for women occurred during their deployment to the Gulf while the declines for men were about equal between during and after deployment.
 - 4. The observed effects were not a function of veterans' ages.

Implications:

- 1. It is relatively certain that Gulf War veterans (both men and women), and to a lesser extent those mobilized elsewhere, experienced declines in perceived health relative to those not mobilized. These perceptions should be taken seriously rather than being written off as artifacts of age, hysteria, or self-report bias.
- 2. It appears that deployment posed particular difficulties for the perceived health of women veterans. Assuming that the U.S. military will continue to be sent on frequent overseas missions, it is imperative that these issues be explored further and clinical approaches enhanced.
- 3. Further research by agencies independent of the federal government is warranted. Our research approach, I believe, led to contacts with many veterans who might not have responded to agents of

the federal government, whom they felt had betrayed their trust by failing to provide reliable, accessible health care for their perceived health problems.

- 4. Informal analyses of data from Kansas parallel the Ohio findings, indicating that the results of both studies probably generalize to the Midwest, if not the entire United States.
- 5. The present results do not disprove the contention of some researchers that awareness of a "Desert Storm syndrome" leads to greater body awareness by Gulf War veterans, and hence, greater reporting of problems associated with aging. While we controlled for age and possibly the actual effects of aging, we did not control for levels of body awareness.

NOTE: for recent research from the Ohio Desert Storm project, also read the reprints available:

Walter R. Schumm et al., "Attitudes of Reserve Component servicemembers regarding the consequences of frequent overseas deployments," <u>Psychological Reports</u>, 1998, 83, 983-989.

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Addendum to Walter R. Schumm's presentation, February 17, 1999.

Another approach to understanding deterioration in perceived health would involve the changes in percentages of different health conditions.

Among those who reported "Excellent" health before Desert Storm (prior to August 1990), these changes occurred:

GROUP

	NONMOB	GULF VETS
Remained "Excellent"	73%	23%
to "Very Good"	11%	19%
to "Good"	9%	27%
to "Fair"	2%	24%
to "Poor"	4%	8%

Results for those mobilized in the USA only were 57% excellent, 11% very good, 17% good, 11% fair, and 3% poor. Too few cases to reliably assess for those deployed overseas.

February 17, 1999



Terri Roberts, J.D., R.N. **Executive Director** FOR MORE INFORMATION CONTACT: Terri Roberts, J.D., R.N. 700 SW Jackson, Suite 601 Topeka, Kansas 66603-3758 785-233-8638

HCR 5021 Memorializing the Federal Government and the State of Kansas to Continue to Research Gulf War Illness and to **Provide Benefits**

Madame Chair and members of the House Federal and State Affairs Committee, thank you for the opportunity to appear before you today. I am Lieutenant Colonel Deborah Rose, a member of the 190th Air Refueling Wing. I am a registered nurse and did serve in the Persian Gulf during Desert Shield. I also serve as an advisor to the Kansas Persian Gulf War Veterans Health Advisory Board. I come before you today in support of House Concurrent Resolution No. 5021, which memorializes the federal government and the state of Kansas to continue to research Gulf War Illness and to provide benefits. 7500 Kansans were deployed to the Persian Gulf region during Desert Shield and Desert Storm. A significant number of these Kansans were members of the 190th Air Refueling Wing, serving in Jedda, Saudia Arabia during Desert Shield and Desert Storm. They may be suffering long term, chronic illness, but presently no illnesses have been directly attributed to their duty in the Persian Gulf. To date 2,031 of these Kansans have been surveyed by the Gulf War Initiative and thirty percent (30%) of those surveyed display some form of illness collectively identified as Gulf War Illness. The potential long term effects of these illnesses has yet to be determined, but I believe it has a potential negative effect on those who so honorably served their country during a time of conflict. Eight years has passed since the beginning of Desert Shield and the Gulf War Illness must not linger without recognition any longer. On behalf of the KANSAS STATE NURSES ASSOCIATION and in the interest of the Persian Gulf veterans of Kansas I urge your Support of HB 5021. House red + State AHachment #10

THANK YOU.



Irving A. Cohen, M.D., M.P.H.

3940 SW Chelmsford Road Topeka, Ks. 66610-1447 (785) 478-4261

Fellow of the American College of Preventive Medicine Fellow of the American Society of Addiction Medicine

email: irvcohen@idir.net fax: 785-478-9774

Wednesday, February 17, 1999 Testimony on House Concurrent Resolution 5021

I am testifying on my own behalf and in favor of this resolution. I am a retired physician, Board-Certified in Public Health. When I was treating patients at the Colmery-O'Neil VA, here in Topeka, I saw some of the first cases of Gulf War Syndrome here in Topeka. Having previously treated Veterans of WWII, Korea and Vietnam who suffered from PTSD (Post-Traumatic Stress Disorder), I can attest that these men and women who served in the Gulf were not suffering from that disorder, as some Federal officials would like us to believe. As best as I can judge human character, I saw no evidence of malingering, as others would like us to believe.

As a physician, it is difficult to provide any but symptomatic treatment for a disease we do not understand. The Veterans I met did not want money. They wanted to be well again, to be made whole. Doing that requires an honest effort to evaluate this disease, to try and find the source of the problem.

When I tried to confirm a history of exposure to various agents, I was met by stonewalling and misinformation. I was told many things by officials which bore little resemblance to what the Veterans themselves related. Yet, the Veterans themselves, from different units and who did not know each other, all told consistent stories.

Suspicious of one particular agent, Pyridostigmine (the "antinerve gas" pill), I traveled to Washington at my own expense to obtain and exchange information at the first Gulf War conference at the NIH as well as to review obscure German scientific publications at the National Library of Medicine on effects of this class of medication.

My work with Veterans halted with my retirement, but resumed recently as I have volunteered to assist the Kansas Commission on Veterans Affairs. I have also been asked by a Veterans group from out-of-state to attend the upcoming CDC meeting in Atlanta, which I hope to do.

Given this background, I feel well qualified to state that this Concurrent Resolution is a much needed statement on behalf of Kansas Veterans, as well as Veterans elsewhere. Kansas was fortunate to have found Doctor Lea Steele, an Emporia native and a well-trained epidemiologist, to carry out this initial study of problems of Kansans who served in the Gulf, as well as possible effects on their families. Her dedication to this project is to be commended. The lack of Federal fiscal support may have been a blessing in disguise, since her study is free of some of the biases that may have been introduced by funding agency design constraints.

In conclusion, I urge your full support of this resolution. It sends a clear message to our Veterans and their families that we believe and support them.

I would like to thank this Committee, as well as Representative Thimesch, for this opportunity to appear and present my views.

House Fed + State Attachment #1/ 2-17-99 House Concurrent Resolution No 5021 Memorializing the Federal Government and the State of Kansas to Continue to Research Gulf War Illness and to Provide Benefits.

Madam Chair and members of the Federal and State Affairs Committee, thank you for the opportunity to appear before you today. I am Lieutenant Colonel Joe Rose, a member of the Headquarters, Kansas Air National Guard, Adjutant Generals Department. I am the Human Resources Director for the Kansas Army and Air National Guard. I am a Viet Nam Era Veteran as well as a Desert Shield and Desert Storm Veteran I arrived in the Persian Gulf on 10 Aug 90 and returned to Kansas on the 14th of March 1991. I come before you today in support of House Concurrent Resolution No. 5021, which memorializes the federal government and the state of Kansas to continue to research Gulf War illnesses and to provide benefits. While in the Persian Gulf I was assigned to the 1709th Provisional Air Refueling Wing, Jedda, Saudi Arabia, serving as the Deputy Commander for Maintenance, E model tanker fleet. Hundreds of members of the 190th Air Refueling Wing served under my command during this conflict. Some have experienced unexplained illnesses since returning. Some may yet experience long term or chronic illness in the future which may not be attributed to their Persian Gulf service. Continued research is vital for proper identification of the cause of these illnesses. Over 2000 Kansas veterans of the war in the Persian Gulf have been surveyed by the Gulf War Initiative and thirty percent of those surveyed display some form of illness potentially attributed to this service. We cannot permit today the scenario faced by veterans of the Viet Nam War. If there is a connection between Persian Gulf service and today and tomorrow's illnesses, we owe those who proudly served their country, answers. I respectfully request, on behalf of all Persian Gulf veterans of Kansas, your support of House Concurrent Resolution 5021.

House Fed & State Attachment #12 2-17-99 #13

Testimony of Jeffrey S. Ford, President Desert Storm Assistance Foundation, Inc.

I am here today in support of the report of The Kansas Persian Gulf War Veterans Health Initiative and its' relevant resolution. With all my knowledge and expertise I cannot come before you today and tell you why veterans of the Gulf war are experiencing the signs and symptoms know as Gulf War Veterans Illnesses. We do now know that they are ill at a rate of nearly 30% higher than their peers that did not serve in the gulf. Now, eight years after 697,000 service members freed the nation of Kuwait, answers continue to elude us. This is largely in part due to the poor response of the Federal Government to the evident problem.

In June of 1997 the Government Accounting Office (GAO) found that, "Federal research on Gulf War veterans' illnesses and factors that might have caused their problems has not been pursued proactively. Although these veterans' health problems began surfacing in the early 1990s, the vast majority of research was not initiated until 1994 or later. Much of this research was associated with legislation or external reviewers' recommendations. This 3-year delay has complicated the task facing researchers and has limited the amount of completed research currently available. Although at least 91 studies have received federal funding, over 70, or four-fifths, of the studies are not yet complete, and the results of some studies will not be available until after 2000". GAO/NSIAD-97-163 Gulf War Illnesses: Improved Monitoring of Clinical Progress and reexamination of Research Emphasis Are Needed.

Now with this in mind, since the time that this report was written, the Kansas legislature passed their health initiative, funded the work, the study

House Fed & Si Attachment is 2-17-99 was designed, implemented and finished and yet to this date, no progress has been made concerning the aforementioned federal studies.

Also, according to the same GAO findings, "the DOD and VA should determine the specific research questions that need to be answered. Epidemiologic studies should be designed with the objective of answering these questions given the input of experts in epidemiologic research methods and data analysis, along with the input of experts in the subject matter areas to be investigated."

In Kansas this is exactly what has been done. For the first time a state has taken the initiative to perform an investigation into the nature of these illness and how they affect their citizens. Kansas has set an example that many other states are likely to follow.

With no federal funding or bias, the state was able to ask the right questions. Many times while comparing information from the Kansas study to evidence found in other bodies of federal work we find that there is data that is concurrent with that which we have repeated in our work. However, in the summaries of federal studies the evidence is explained away or significantly downplayed. We have termed this repetitive behavior as "non-seeking" or "no findings to yes answers".

Such concurrent findings can be found in the January 15, 1997 issue of The Journal of the American Medical Association (JAMA). An Iowa based study also found that the same reported illnesses are found to be higher in those that deployed to the Gulf Region than in those that did not. And when reporting on quality of life and functional health they found, "Persian Gulf War veterans reported significantly lower measures of social

functioning, mental health and physical functioning. In fact, among Persian Gulf War military personnel, the self-reported medical and psychiatric conditions were significantly related to interference with social activities and self-reports of decreased performance at work. These findings suggest that the Persian Gulf conflict and the medical conditions reported by Persian Gulf military personnel substantially impair their daily activities." JAMA. 1997;277:238-245.

Unfortunately, "The researchers say there may be several explanations for the results. In addition to specific exposures in the Persian Gulf, the investigators consider[ed] the possibility that the medical and psychiatric conditions that were reported among Persian Gulf War military personnel may not be unique to the Persian Gulf War, but are analogous to conditions reported by veterans of other wars, dating back to the U.S. Civil War and may be caused by the experience of warfare rather than by a specific exposure."

This is a perfect example of the research findings in favor of the veterans being explained away with stress. As the GAO report cites, "The major conclusion concerning physical health of these veterans is that for those who deployed to the Gulf War and currently report physical symptoms, neither stress nor exposure to combat or it's aftermath bear much relationship to their distress; only the fact of deployment differentiates them from their less-burdened counterparts." R.H. Stretch et al., "Physical Health Symptomatology of Gulf War-Era Service Personnel from the States of Pennsylvania and Hawaii. Military Medicine, Vol.160, March (1995), pp. 131-136.

In conclusion, I must in my expert opinion again stress how significant this study is and will soon become. It comes from a state that is showing the nation it cares about its veterans and wants accurate and constructive answers. As this study has been so well planned and expertly done, it will provide break though evidence that will have certain repercussions not only in this nation's capitol, but also throughout the world. Our coalition partners in the Gulf War are reporting illness and asking the same questions as we. They thirst for the knowledge from medical research, fresh and clearly sprung from right here in Topeka, Kansas.

The Desert Storm Assistance Foundations' offices are located at 406 West 34th Street, Suite 701 in Kansas City, Missouri, 64111

Call 1-877-PGW-VETS or e-mail at <u>dsaf@swbell.net</u>
Its' mission is to provide outreach, direct assistance and research funds for all those affected by the War in the Persian Gulf.

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Biography of Jeffrey S. Ford, President Desert Storm Assistance Foundation, Inc.

Education:

Lee's Summit High School graduate, 1981

Kansas City Metropolitan Community College graduate, 1996. Degree - Associate of Arts

University of Missouri, Kansas City, ongoing Degree - Public Business Administration, major. Political Science, minor.

Related experience:

Drafting and Design Engineer, Woodward Clyde, Assoc., 1985-87 Contractor for groundwater survey of toxins at Superfund Hazardous Waste sites.

Combat Engineer, HHC 307th Engineer Battalion, 82nd Airborne Division, Ft. Bragg, North Carolina. 1988 to 1992, service in Operation Desert Shield/Storm, September 1990 to April 1991.

Executive Director, National Gulf War Resource Center, Washington, D.C. 1996 to 1997. Leader, grassroots activism. Testimony before the Presidential Advisory Committee (PAC) on Persian Gulf Veterans' Illnesses, October, 1996. Advisor to PAC 1996 to 1997, 5 U.S. Senatorial, 14 Congressional offices, 5 Congressional Committees, the Government Accounting Office, Office of the Special Assistant to the Secretary of Defense on Persian Gulf Veterans Illnesses Testimony before U.S. House of Representatives Committee on Veterans Affairs, Subcommittee on Health, February, April, and June, 1997.

President, Desert Storm Assistance Foundation Inc., Kansas City, MO. Continuing research and outreach into the nature of Gulf War veterans illnesses. Raising of funds for research and direct assistance to those affected by the Persian Gulf War of 1991. Expertise in the body of Federal and independent research and treatment programs. Advisor to The Kansas Persian Gulf War Veterans Health Initiative, 1996 to Present.

Lifelong resident of the Kansas City Metropolitan area.

Research materials

cited

In

Testimony in Support of Resolution

By

Jeffrey S. Ford

February 17, 1999

Topeka, Kansas

Physical Health Symptomatology of Gulf War-Era Service Personnel from the States of Pennsylvania and Hawaii

Robert H. Stretch, PhD CPT Paul D. Bliese, MSC USA David H. Marlowe, PhD

We present data on physical health and possible "Gulf War syndrome" from a Congressionally mandated study of over 4,000 active duty and reserve service members from the states of Hawaii and Pennsylvania who served during Operation Desert Storm. We found that deployed veterans report significantly more physical health symptoms than non-deployed veterans that cannot be explained by reasons other than deployment alone. We also identified a subgroup of 178 deployed veterans at risk for possible Gulf War syndrome. We recommend that services collect baseline information from units likely to deploy in the future and update that information regularly.

Introduction

Acting upon the direction of Congress as outlined in the 1992 Defense Appropriations Act, the Assistant Secretary of Defense for Health Affairs tasked the Department of Military Psychiatry, Walter Reed Army Institute of Research (WRAIR), to study the effects of the Persian Gulf War on active duty, National Guard, and reserve units in the States of Hawaii and Pennsylvania.

Specifically, the Congress requested that the health and adjustment of veterans in these two states be assessed to determine the necessity (if any) for providing services to facilitate the resolution of any potential problems they may have experienced upon return from the Gulf War.

In response to this tasking, the Department of Military Psy-

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chiatry, WRAIR, developed and implemented a research protocol with the following objectives:

(1) To define the general psychological and psychosocial status of the military populations under study in the states of Hawaii and Pennsylvania.

(2) To determine those subpopulations demonstrating higher than usual levels of psychological and psychosocial symptomatology, and to analyze probable causative and relational factors, e.g., demographic, experiential (exposure to combat or other trauma), organizational stresses, family stresses, illnesses, predispositional factors, etc.

(3) To determine those subpopulations demonstrating potentially high risk for diagnosis of post-traumatic stress systoms or post-traumatic stress disorder (PTSD) as a result of experiences in Southwest Asia (SWA) during Operation Desert Shield/Storm (ODS) deployment.

Although the primary concern of this study is on psychological and psychosocial adjustment, we felt that, given the large body of literature that links acute and chronic life stresses and mental health status to risk for future morbidities, it was also important to assess physical health symptomatology in this protocol. For example, recent research has linked mental health state to future functional gastrointestinal and hyperimmune diseases. Additional recent evidence suggests that upper respiratory complaints were common among troops who served in Operation Desert Shield/Storm and were related to both the troops' housing and to their exposure to the outside environment.²

Since the end of the Gulf War, concern over the physical health of ODS veterans has also surfaced in the form of what has been termed "Gulf War syndrome." This refers to as-yet

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unexplained reports of illness that include generally vague symptoms such as fatigue, weakness and malaise, skin rash, headache, and respiratory symptoms. Possible causes of this "syndrome" have been hypothesized to include exposure to fumes and smoke from oil well fires, diesel fumes, toxic paints, pesticides, depleted uranium, and biological and/or chemical warfare agents. Psychological stress has also been offered as a possible explanation.

Although this study was not designed to look at the possible prevalence or risk for Gulf War syndrome, widening concern over this issue led us to create, post-hoc, an algorithm of physical and psychological symptoms to identify a population that might be considered to be at some level of risk for this

syndrome.

The primary focus of this report is the self-perceived physical health of the veterans sampled as well as possible risk for Gulf War syndrome. Additional data on general psychological health and risk for development of PTSD will be presented elsewhere.

Method

Subjects

Subjects consisted of active duty and reserve personnel assigned to all Army, Navy, Air Force, and Marine units in the states of Hawaii and Pennsylvania. Approximately 16,167 survey questionnaires were sent out to these various units. The Hawaii National Guard decided not to distribute the 2,000 questionnaires sent to them since few individuals had been deployed for Operation Desert Shield/Storm and few problems were perceived.

Measures

All subjects received a survey questionnaire similar to that used in previous studies of nearly 20,000 soldiers involved in Operation Desert Shield/Storm conducted by the Department of Military Psychiatry, WRAIR. Subjects responded anonymously to the questionnaire and concerns over possible coercion were generally alleviated by the researchers' commitment to abide by the National Institutes of Health Human Research Guidelines. We also felt that the anonymous reporting would preclude any individual advantage that might accrue from biased reporting.

The questionnaire itself provides self-report information on demographics, psychological and psychosocial symptomatology, the presence of symptoms specifically related to deployment and life in a combat theater, physical health symptomatology, perceived sources of past and present stress, perceived levels of present stress, causal attributions of present problems, and the relative weight in life of problems of the deployment to SWA.

Results

Surveys were received from 4,334 veterans, providing a gross return rate of 31%, which is consonant with that of other mail surveys carried out in the armed services. Several factors may have operated to reduce the return rate. One factor is that since the surveys were distributed to units, rather than di-

rectly to individuals, the return rate is influenced by the number of personnel present for duty at time of distribution, particularly at monthly weekend reserve meetings. Additional factors include decommissioning of ships that had been deployed to the Persian Gulf and the downsizing of units in general.

Demographic Data

Of the total sample of 4,334 veterans, 1,739 deployed as a result of Operation Desert Shield/Storm and 2,512 did not deploy. Of the 1,739 who deployed, 1,524 deployed to the Persian Gulf, with the remainder deploying to Germany, CONUS, or other locations.

Active Duty Sample

The active duty sample consists of 715 veterans who deployed and 1,576 veterans who did not deploy.

Deployers. The 715 deployers in the active duty sample are primarily from Hawaii, with the largest number drawn from the U.S. Marine Corps (60%) and the U.S. Navy (28%). No active Army units from Hawaii or Pennsylvania deployed to the Persian Gulf. Of the population responding, approximately 91% were enlisted and 9% were officers. Almost 83% of the enlisted personnel were in pay grade E-6 and below. The deployed veterans averaged 26.8 years of age and are significantly older than their non-deployed counterparts (mean = 24.5 years, t [1875] = 7.70, p < 0.001). At the same time, however, the active duty deployers are significantly older than the reserve deployers (mean = 35.6 years, t [1274] = -20.28, p < 0.001).

Approximately 67% of the active duty deployers were white 15% were black, 9% were Hispanic, and over 9% Asian or other. Over 98% were high school graduates and average time on active duty was slightly less than 5 years. Nearly 49% of the deployers were married, with another 5% either separated or filed for divorce. Of those married, 77% described their marriages in positive terms.

Non-Deployers. The 1,576 non-deployed active duty veterans were primarily from the Marine Corps (71%), the Navy (17%), and the Air Force (12%). Over 95% of the non-deployers were enlisted and 5% were officers. Of the enlisted personnel, almost 89% were in pay grade E-6 and below. The ethnic composition of the non-deployers was 67% white, 16% black, 10% Hispanic, and 7% Asian or other. Over 99% were high school graduates and average time on active duty was about 3 years. Significantly more non-deployers (57%) than deployers (43%) were either single (never married) or engaged (c^2 [7,2257] = 47.16, p < 0.0001). Of those married non-deployers, almost 90% viewed their marriages positively.

Reserve Sample

The reserve sample consists of 1,714 veterans: 766 who deployed to the Persian Gulf and 948 who did not deploy.

Deployers. The 766 deployed reserves were primarily from the Air National Guard (37%), the Army Reserve (33%), and the Marine Corps Reserve (16%), with nearly all reservists being from Pennsylvania. Approximately 80% of the reservists were enlisted and 20% were officers. Of the enlisted personnel, almost 63% were in pay grades E-6 and below. The mean age of the deployed reservists was 35.7 years, which is significantly



older than the non-deployed reservists (33.0 years, t[1668] = 5.37, p < 0.0001).

Almost 93% of the reserve deployers were white, 5% black, and the remainder were Hispanic, Asian, or other. Compared to the active duty deployers, the reserve deployers were significantly more likely to be white $(c^2[4,1456]=159.41, p<0.0001)$. Over 99% of the reserve deployers were high school graduates or better and mean time in the reserves was over 6 years. Approximately 8.5% claimed to be unemployed and 9% were full-time students. Nearly 59% are currently married, with another 4% either separated or filed for divorce. Of those married, more than 80% describe their marriages in positive terms.

Non-Deployers. Of the 948 non-deployed reservists, the majority were from the Air National Guard (42%), the Army Reserve (24%), the Army National Guard (12%), and the Marine Corps Reserves (10%). Nearly 87% were enlisted and 13% were officers. Of the enlisted personnel, 75% were in pay grades E-6 and below. The ethnic composition of the non-deployed reservists was 87% white, 9% black, and slightly less than 4% Hispanic, Asian, or other.

Approximately 96% were high school graduates or better and average time in the reserves was slightly less than 6 years. About 9.5% claimed to be unemployed and 15% were full-time students. Nearly 50% of the reserve non-deployers were currently married, with another 3% either separated or filed for divorce. Slightly more than 80% of those married rated their marriages in positive terms.

Physical Health Symptom Data

Active Duty Sample

Table I presents a comparison of the percentages of both active duty deployers and non-deployers who indicated that

TABLE I

ACTIVE DUTY PHYSICAL SYMPTOM CHECK LIST RESPONSES

	Deployers	Non-Deployers
Flu	15.4%	7.3%
Head colds	32.8%	16.6%
Sinus troubles	39.2%	22.0%
Sore throat	28.5%	14.6%
Difficulty swallowing	13.9%	6.4%
Headaches	44.7%	24.3%
Back problems	28.0%	15.3%
Allergies	13.0%	8.7%
Stomach upset	22.3%	8.1%
Muscle aches/cramps	27.1%	13.4%
Aching joints/bones	31.4%	16.1%
Urinary infections	2.1%	1.4%
Constipation	7.7%	2.9%
Skin irritation	18.4%	8.5%
Menstrual difficulties	1.7%	1.5%
Eye/ear/nose problems	17.2%	5.5%
Cough	17.2%	7.0%
Blood pressure	22.8%	9.9%
Chills/fever	5.7%	1.3%
Hoarseness	9.7%	4.1%
Heart problems	6.7%	2.4%
Weight loss/gain Other	1.2%	0.7%
Outer	6.2%	2.6%

they have experienced any of 23 physical health symptoms within the past month. Most symptoms (with a few exceptions, such as blood pressure or heart problems) represent common complaints that are self-assessable without the assistance of a medical professional or diagnostic laboratory.

With the exception of urinary infections, menstrual problems, and weight loss-gain, the deployed veterans reported being bothered significantly more than the non-deployed veterans on nearly each symptom (p < 0.05).

When asked if they would like to be medically evaluated for any health problems since Operation Desert Storm, significantly more deployers (27%) than non-deployers (5%) said they would ($c^2[1,2081] = 212.38$, p < 0.001).

Reserve Sample

A similar comparison of health symptom responses between reserve deployers and non-deployers is presented in Table II. Like the deployers in the active duty sample, those in the reserve sample reported being bothered significantly more than the non-deployers on all problems except urinary infections and weight loss/gain (p < 0.01).

Significantly more reserve deployers (32%) than non-deployers (3%) also said they would like to be medically evaluated for health problems since Operation Desert Storm ($c^2[1,1597] = 251.98$, p < 0.001).

Potential Confounds

Two major potential confounds of any symptom check list, smoking and drinking, were assessed in the questionnaire. In the active duty group, over 68% of both deployers and non-deployers reported not smoking. These figures are consonant with overall service rates. More active duty non-deployers (36%) than deployers (29%) reported not drinking alcohol,

TABLE II RESERVE PHYSICAL SYMPTOM CHECK LIST RESPONSES

	Deployers	Non-Deployers
Flu	23.2%	13.1%
Head colds	45.3%	26.8%
Sinus troubles	46.2%	25.2%
Sore throat	35.2%	19.7%
Difficulty swallowing	16.2%	7.2%
Headaches	46.6%	25.8%
Back problems	26.0%	12.7%
Allergies	18.5%	11.3%
Stomach upset	28.0%	9.0%
Muscle aches/cramps	31.7%	11.0%
Aching joints/bones	35.3%	8.6%
Urinary infections	3.3%	1.8%
Constipation	8.0%	2.4%
Skin irritation	18.5%	3.9%
Menstrual difficulties	3.1%	2.3%
Eye/ear/nose problems	17.0%	5.6%
Cough	23.1%	12.8%
Blood pressure	10.8%	4.3%
Chills/fever	14.5%	4.6%
Hoarseness	12.0%	3.7%
Heart problems	3.6%	1.2%
Weight loss/gain	12.9%	6.7%
Other	10.9%	1.9%

whereas nearly 14% of both groups reported having more than 10 drinks per week.

Among the reserve sample, 76% of deployers and 72% of non-deployers reported not smoking. Approximately 38% of non-deployers and 30% of deployers reported not drinking alcohol, whereas only 6% of deployers and 8% of non-deployers reported having more than 10 drinks per week.

Controlling for smoking and drinking did not significantly alter the outcomes in symptom differences. The distribution of symptoms that cuts across units (for example, over 700 members of the active duty sample come from the sample USMC organization in Hawaii) divided approximately 2 to 1 between non-deployers and deployers and precluded the results being biased by a local epidemic such as influenza affecting units with very high percentages of deployers only.

The data also indicate that although both active duty and reserve deployers claimed more physician visits during the two weeks prior to completing the questionnaire, the comparative ratio was significantly greater for reserve deployers than for non-deployers. Twenty-one percent of reserve deployers said they had visited a physician compared to 13% of non-deployers ($c^2[1,1687] = 16.99, p < 0.001$), whereas 25% of active duty deployers had visited a physician compared to 22% of non-deployers. This difference may indicate that active military service is particularly stressful physically and results in more frequent long-term use of medical resources.

Analyses of Health Findings

The gross results suggest that deployers and non-deployers have large differences in the occurrence of physical health symptoms. These findings are tempered, however, by the fact that the deployers and non-deployers tend to differ on a number of demographic variables. Since socioeconomic status variables have been shown to have important links to health that persist even when a number of risk behaviors such as smoking, physical inactivity, poor diet, and substance abuse are statistically controlled, we used logistic regression to control for the following demographic variables: age, rank, education, marital status, and branch of military service. Logistic regression was used rather than hierarchical regression because the

outcome variables are categorical (yes and no responses as to whether the respondent had experienced a particular health problem in the past month).

Table III presents the results of the analyses for a subset of 12 of the 23 health symptoms. The logistic regression was unable to converge on solutions for the remaining 11 health symptoms.

In the analyses, two models were run. In the first model, we predicted the likelihood of a positive report of a health symptom from a model including demographic variables and a deployment status variable (coded "1" for deployed and "0" for non-deployed) as predictors. In the second model, we used only the demographic variables as predictors. The difference between the two models (denoted by the term G) indicates the degree to which the deployment status variable helped in the prediction of self-reports of health symptoms over a model based solely on demographic variables.

In these analyses, the odds ratio indicates the extent to which deployers are more or less likely to report symptoms than non-deployers. For example, an odds ratio of 2.00 indicates that deployers are twice as likely to report a health symptom as are non-deployers. An odds ratio of 0.5 would indicate that deployers are only half as likely to report health symptoms as were non-deployers. Odds ratios are calculated with all of the demographic variables in the model. Hence, they can be interpreted as the likelihood that a deployer will report a health symptom when effects of demographic variables are taken into account.

The results in Table III clearly show that deployment status (deployed versus non-deployed) is related to self-reports of health symptoms. In all cases, the measure of the difference between the two models (the G statistic) is significant (p < .001). This indicates that the model using both deployment status and demographic variables as predictors of health symptom occurrence is significantly better than the model using only demographic variables as predictors. This finding is analogous to finding a significant R^2 in hierarchical regression.⁴

The odds ratios provide evidence of the degree to which deployment status is important in the prediction of self-reports of

TABLE III

IMPACT OF DEPLOYMENT STATUS ON REPORTS OF HEALTH SYMPTOMS CONTROLLING FOR DEMOGRAPHIC DIFFERENCES: LOGISTIC REGRESSION RESULTS

Health Symptom	-2 LOG for Demographics and Deployment	-2 LOG for Demographics Alone	G Statistic	Odds Ratio for Deployment
Head colds	3979.23	4094.62	115.39	2.42
Sinus trouble	4254.28	4358.77	104.49	2.24
Sore throat	3615.33	3695.86	80.53	2.19
Difficulty swallowing	2128.09	2186.75	58.66	2.58
Headaches	4327.14	4452.27	125.13	2.40
Back Problems	3315.31	3382.22	66.91	2.14
Stomach upset	2817.37	2944.64	127.27	3.13
Muscle aches	3184.66	3297.73	113.07	2.70
Aching joints	3288.80	3449.59	160.79	3.17
Cough	2665.68	2722.80	57.12	2.23
Chills/fever	1357.95	1402.84	44.89	2.90
Other problems	1006.44	1054.54	48.10	3.76

12-10

physical health symptoms. As with hierarchical regression, a statistically significant G does not necessarily mean practical significance. The lowest odds ratio is 2.14 (back problems) and the highest odds ratio is 3.76 (other problems). This means that at the low extreme, the deployed group is 2.14 times more likely to report back problems than the non-deployed group. At the high extreme, the deployed group is 3.76 times more likely to report other problems.

What makes this result striking is that, as indicated above, it is the odds ratio taken from the full model. Consequently, this odds ratio can be interpreted as being the effect that deployment status plays on self-reports of health symptoms when demographic variables are taken into account.

Gulf War Syndrome Data

Oil Fire Exposure

As mentioned previously, concern has widened over the issue of the symptom complex known as Gulf War syndrome, with one of the possible causes being exposure to oil fires. In this study, 28% of the active duty sample of deployers and 40% of the reserve deployers claim to have been exposed to oil fires in the Kuwait/Iraq theater. Of those active duty deployers exposed, 44% claim to have been moderately to extremely distressed by their exposure at that time, and 50% claim moderate or greater concern over the exposure at present. Among the reserve deployers, 39% claimed moderate or greater concern at time of exposure, and 46% claim such concern at time of survey. Whether exposure to oil fires and smoke during the war has actually led to health problems is unknown. One thing that is clear, however, is that the passage of time has not moderated levels of concern about the consequences of exposure.

Gulf War Syndrome Algorithm

Concern over this issue led us to create an algorithm of physical and psychological symptoms (see Table IV) that would allow us to identify a subset of individuals at some level of potential risk.

In an attempt to identify the maximum at-risk population, we selected all individuals who answered positively to the presence of any five or more of the health symptom items and any one of the psychological symptoms. Although there is some

TABLE IV GULF WAR SYNDROME ALGORITHM SYMPTOMS

Headache
Stomach/intestinal upset
Muscle aches or cramps
Aching joints and bones
Weight loss/gain
Cough
Chills/fever
General level of spirits
Level of energy, pep, vitality
Trouble remembering things
Pains in heart or chest
Feeling low in energy or slowed down
Trouble getting your breath
Trouble concentrating
Feeling weak in parts of your body

modest clustering of individuals who meet the algorithm, they tend to be spread across all units with reasonable response rates. Of those deployed to SWA, 178 were selected by the algorithm, as were 55 who were non-deployers, which indicates that the algorithm is picking up a fair number of false-positives. Approximately 42% of those deployers were individuals who had attributed their present problems to ODS- or ODS return-related problems, 36% were individuals who claimed to have been exposed to oil fires, and 45% were individuals who expressed either "quite a bit" or "extreme" concern over possible exposure to oil fires during ODS.

Discussion

The results of the regressions presented in Table III suggest that there are consistent, large differences in self-reports of physical symptoms between the deployed and non-deployed groups, even when demographic differences are taken into account. Although the symptoms described are limited to those we listed in our survey, the responses are consistent with flulike or respiratory illness. The question we have been unable to answer is why these differences persist.

Although not presented here, we have examined data on general psychological health, risk for development of PTSD, levels of stress encountered during deployment (including exposure to traumatic combat experiences) and upon return, and current life stressors.

Results of hierarchical regression analyses suggest that deployment status plays only a minor role in our ability to predict current psychological health. When demographic differences are accounted for, deployers have scores based on the Brief Symptom Inventory⁵ that are, at most, 4% higher than the scores of non-deployers. Results of hierarchical discriminate analyses suggest that health outcomes and current life stressors are largely independent.

The major conclusion concerning physical health of these veterans is that for those who deployed to the Gulf War and currently report physical symptoms, neither stress nor exposure to combat or its aftermath bear much relationship to their distress; only the fact of deployment differentiates them from their less-burdened counterparts.

The data on Gulf War syndrome are also not easily explained. A constellation of "flu-like" symptoms is reported by about 30% of veterans who deployed to SWA. For the most part, these reports of physical symptoms are not strongly correlated with reports of stress; rather, they are linked to the fact of deployment to the Persian Gulf.

Although the link between Gulf War syndrome symptoms and exposure to toxic substances (such as oil fires and smoke) has yet to be definitively established, our data do indicate that a large minority of deployed veterans report possible exposure and that their fears about this issue began to increase upon their return and exposure to media reports of the problems of different individuals and groups.

There does appear to be a link between populations at risk for Gulf War syndrome and a possible diagnosis of PTSD. Approximately 30% of those veterans who meet the criteria for Gulf War syndrome also meet the criteria for possible diagnosis of PTSD, although 70% of the Gulf War syndrome risk group

and 52% of the PTSD risk group are essentially independent of each other. We can say that meeting the criteria of possible risk for PTSD places one at greater risk for presenting a symptom set similar to the Gulf War syndrome set than do those symptoms in terms of generating risk for a possible diagnosis of PTSD.

It is our recommendation that the medical symptoms reported by our sample, media reports of Gulf War syndrome, and other possible medical problems arising from Gulf War service should focus our attention on future deployments. With the recent expansion in the number of deployments due to peacekeeping efforts, our military forces face increased chances of being deployed to Third World sites, which include areas about which our medical knowledge is limited.

We recommend establishment of a panel of experts to determine what, if any, samples (e.g., blood) might be collected from

all deploying forces for later use should questions arise as to their exposure to disease, toxins, or agents that might have proved harmful to them in some way.

References

- Vogt T, Pope C, Mullooly J, et al: Mental health status as a predictor of morbidity and mortality: a 15-year follow-up of members of a health maintenance organization. Am J Public Health 1994; 84: 227-31.
- Richards AJ, Hyams KC, Watts DM, et al: Respiratory disease among military personnel in Saudi Arabia during Operation Desert Storm. Am J Public Health 1993; 83: 1326-9.
- Adler NE, Boyce T, Chesney MA, et al: Socioeconomic status and health. Am Psychol 1994; 49: 15–24.
- Hosmer DW, Lemeshow S: Applied Logistic Regression. New York, John Wiley & Sons, 1989.
- Derogatis LR, Spencer PM: The Brief Symptom Inventory (BSI): Administration, Scoring & Procedures Manual—I. Baltimore, MD, Clinical Psychometric Research, 1982.

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GULF WAR VETS HAVE HIGHER RATE OF ILLNESS THAN OTHER MILITARY PERSONNEL

Cognitive problems are more than double that of veterans who served outside the Gulf

WASHINGTON, D.C.—An Iowa study finds that military personnel who served in the Persian Gulf War have a greater prevalence of self-reported medical and psychiatric conditions than those serving elsewhere in the military during the same time, according to an article in the Jan. 15 issue of The Journal of the American Medical Association (JAMA).

Researchers in the Iowa Persian Gulf Study Group, developed a telephone survey to study a random sample of military personnel who listed Iowa as home. Their task was to determine the frequency and type of health complaints reported by veterans serving in the Gulf War region and to compare these rates of illnesses with those of military personnel serving outside of the Gulf War region..

David A. Schwartz, M.D., M.P.H., the group's principal investigator, and a professor at The University of Iowa College of Medicine in Iowa City, released the survey findings of 3,695 subjects at a press conference today (Jan. 8).

"Compared with non-Persian Gulf War military personnel, Persian Gulf War military personnel reported an 11 percent higher prevalence of symptoms of cognitive dysfunction; a nine percent higher prevalence of symptoms of fibromyalgia; a six percent higher prevalence of symptoms of depression, a three percent higher prevalence of symptoms of anxiety disorder; a two percent higher prevalence of symptoms of alcohol abuse, bronchitis,

percent higher prevalence of symptoms of alcohol abuse, bronchitis, and asthma; a one percent increase in post-traumatic stress disorder and chronic fatigue; and an increase in the prevalence of sexual discomfort in both the respondent and the female partner of the respondent," Dr. Schwartz said.

A total of 14.7 percent of Persian Gulf War military personnel versus 6.6 percent of non-Persian Gulf War military personnel had symptoms of two or more medical and psychiatric conditions.

Persian Gulf War interviewees were asked about known exposures during the war. The researchers found that most of the self-reported Persian Gulf War exposures are significantly related to many of the medical and psychiatric conditions.

They also found that being involved in the Persian Gulf War substantially affected the self-reported assessment of quality of life and functional health. For instance, Persian Gulf War veterans reported significantly lower measures of social functioning, mental health and physical functioning. In fact, among Persian Gulf War military personnel, the self-reported medical and psychiatric conditions were significantly related to interference with social activities and self- reports of decreased performance at work. These findings suggest that the Persian Gulf conflict and the medical conditions reported by Persian Gulf military personnel substantially impair their daily activities.

Finally, among Persian Gulf War veterans, researchers found relatively few differences between the frequency of medical and psychiatric conditions reported by the national guard and reservists versus those reported by regular military. The national guard and reserve study group only reported a one percent increase in the prevalence of symptoms of chronic fatigue and a four percent increase in symptoms of alcohol abuse. These findings suggest that their results apply to all military personnel involved in the Persian Gulf conflict, regardless of the type of military service.

The researchers say there may be several explanations for the results. In addition to specific exposures in the Persian Gulf, the investigators consider the possibility that the medical and psychiatric conditions that were reported among Persian Gulf War military personnel may not be unique to the Persian Gulf War, but are analogous to conditions reported by veterans of other wars, dating back to the U.S. Civil War and may be caused by the experience of warfare rather than by a specific exposure.

Two of several limitations the authors cite regarding this study is that Iowa has a relatively low proportion of military personnel from minority groups and that the medical and psychiatric conditions as well as the exposure data are based exclusively in self-reported information and have not been fully characterized by objective physical examination or laboratory findings.

Note: This study was supported by a cooperative agreement with the Iowa Department of Public Health and the University of Iowa from the National Centers for Environmental Health, CDC, Atlanta, Ga.

GULF WAR ILLNESSES BROKEN DOWN INTO THREE PRIMARY SYNDROMES Clusters of symptoms indicate brain and nerve damage; possible causes include chemical weapons and pesticides

WASHINGTON, D.C.--Evidence now exists linking military service during the Persian Gulf War to a variety of ailments, including neurologic injuries potentially caused by exposure to chemical weapons and government-issued insect repellent, and possibly by a drug taken to prevent poisoning from nerve gas, according to three articles in the January 15 issue of The Journal of the American Medical Association (JAMA).

Robert W. Haley, M.D., from The University of Texas Southwestern Medical Center at Dallas, and colleagues conducted a series of investigations on 249 Gulf War veterans of the 24th Reserve Naval Mobile Construction Battalion from five southeastern states (Alabama, Georgia, Tennessee, South Carolina, and North Carolina).

Dr. Haley released the information today (Jan. 8) at a press conference in Washington.

In the first investigation, the researchers found that 63 (25 percent) of the 249 veterans reported clusters of symptoms that appear to represent discreet syndromes which were identified by a mathematical computer technique.

They write: "The results of this study identified six apparent syndromes, or variants of a single syndrome, and may help to explain why medical examinations of thousands of ill Gulf War veterans remaining on active duty did not. Our findings were made possible by including non-ill and nonactive-duty veterans ..."

Three primary syndromes and three secondary syndromes were identified. The three primary syndromes are:

Syndrome-1 or "Impaired Cognition" Syndrome - characterized by distractibility, difficulty remembering, depression, insomnia, fatigue, slurring of speech, confused thought process, and migraine-like headaches.

Syndrome-2 or "Confusion-ataxia" Syndrome - characterized by problems with thinking and reasoning processes such as reading, writing, and spelling; getting confused; getting disoriented when trying to locate a car in a parking lot; having problems with balance; having a physician's diagnosis of post-traumatic

stress disorder, depression, or liver disease; and sexual impotence.

Syndrome-3 or "Arthro-myo-neuropathy" Syndrome - characterized by generalized joint and muscle pains, increased difficulty lifting heavy objects, fatigue, and tingling or numbness of the hands, arms, feet, and legs.

The authors suggest that most of the symptoms that comprise the syndromes could be explained by varying combinations of injury to the brain, spinal cord, and peripheral nerves.

Three Clusters Signal Neurologic Damage

Following the identification of the six syndromes, Dr. Haley and colleagues conducted a second investigation. Detailed neuropsychologic exams were performed on 23 symptomatic veterans and 20 well veterans.

The researchers found that the three primary syndromes "appear to represent variants of a generalized injury to the nervous system." The 23 symptomatic veterans consistently scored more in the abnormal direction on objective tests of neurologic function than the well veterans.

The differences in illness severity among the veterans may be due to differences in the age of the veterans at the time of the war, according to the researchers. They found that syndrome-1 was most common among younger veterans, while the risk for syndromes 2-3 increased with age.

Chemical Nerve Agents, Insect Repellent, Anti-Nerve Gas Pills Linked to Neurologic Damage

A third analysis by Dr. Haley and colleagues revealed that wartime exposure to combinations of chemicals such as chemical nerve agents, flea collars and anti-nerve gas pills among some Gulf War veterans were associated with chronic neurotoxic syndromes, which may be variants of a rare disorder called organophosphate-induced delayed polyneuropathy.

The researchers found that veterans who reported wearing pet fleaand-tick collars to repel insects during the war had nearly eight times the risk of syndrome-1 than those who never wore the collars. Veterans who believed they had been involved in chemical weapons exposure were nearly eight times more likely to have syndrome-2 than those who did not believe they were exposed to chemical weapons. Veterans who had been in a sector of far northeastern Saudi Arabia along the Kuwaiti border on the fourth day of the air war were four times more likely to have syndrome-2. The researchers also found that veterans who had adverse effects from the anti-nerve gas medication pyridostigmine bromide combined with a belief that they had been exposed to chemical weapons were five times more likely to have symptoms indicating syndrome-2 than veterans who had only one of the risk factors.

The risk of syndrome-3 increased with the amount of government-issued insect repellent (containing 75 percent DEET) the veterans typically applied to their skin; however this association did not hold true for veterans using other types of insect repellent.

The researchers write: "The findings of our study provide, to our knowledge, the first epidemiologic evidence of associations between environmental risk factors and systematically defined syndromes in Gulf War veterans. Each of the three primary syndromes were strongly associated with a different set of risk factors reflecting possible exposures to different cholinesterase-inhibiting chemicals [chemicals that interfere with normal transmission of messages between nerve cells or between nerve and muscle cells]. This evidence supports our prestated hypotheses that combinations of cholinesterase-inhibiting chemicals may have caused variants of a general nervous system injury ..."