

GAO

Report to the Ranking Minority Member,
Committee on Veterans' Affairs, House
of Representatives

October 1997

GULF WAR ILLNESSES

Public and Private Efforts Relating to Exposures of U.S. Personnel to Chemical Agents





United States
General Accounting Office
Washington, D.C. 20548

**National Security and
International Affairs Division**

B-278006

October 15, 1997

The Honorable Lane Evans
Ranking Minority Member
Committee on Veterans' Affairs
House of Representatives

Dear Mr. Evans:

As you requested, we have developed information related to the Department of Defense's (DOD) custody and disposition of information on the possible use of chemical weapons by Iraq during the Persian Gulf War. Specifically, this report provides information as of September 1997 on the extent to which federal government agencies and private organizations are examining (1) the potential exposure of U.S. military personnel to chemical warfare agents in the Persian Gulf and (2) the circumstances surrounding gaps in the Nuclear, Biological and Chemical (NBC) Desk Log maintained by the U.S. Central Command (CENTCOM) during the war.

Background

Approximately 700,000 U.S. servicemembers served in the Persian Gulf during some point from August 1990 to June 1991. According to DOD, the majority of these personnel returned from the war healthy and remain fit for duty today. However, many of these servicemembers are reporting a wide array of health complaints and disabling conditions, including fatigue, muscle and joint pain, memory loss, and severe headaches. In response to concerns about the servicemembers with these symptoms and the potential health effects resulting from Gulf War service, both DOD and the Department of Veterans' Affairs established programs through which Gulf War veterans could receive medical examinations and diagnostic services. Nearly 100,000 of these servicemembers have participated in clinical evaluation programs established by these two agencies after the war. According to DOD officials, medical research studies with comparison groups of both deployed and non-deployed Gulf War veterans are designed to clarify whether certain medical conditions may be more common among Gulf War veterans. In addition, DOD and several federal agencies, as well as a number of private organizations, are studying whether servicemembers may have been exposed to chemical agents during the war.

According to CENTCOM headquarters staff, the Command began maintaining operational logs upon its arrival in the Persian Gulf on August 8, 1990, until

April 13, 1991, when the last major element of CENTCOM headquarters left the Persian Gulf, for a total of 249 days. The purpose of these logs was to provide a chronological record of key events that occurred each day. In addition to the operational logs, the Command's Nuclear, Biological, and Chemical officer began maintaining an NBC Desk Log in late August 1990. We were told that the NBC Desk Log was maintained on a daily basis except for the periods at the beginning and the end of the deployment. The officials said that it is not known with certainty how many daily entries were made in the NBC Desk Log.

Results in Brief

As of September 1997, 14 federal and private organizations had efforts underway examining potential exposure of U.S. servicemembers to chemical agents and 1 federal organization was examining gaps in the NBC Desk Log maintained by the U.S. Central Command. Relative to potential exposures to chemical agents, 8 federal and 6 nonfederal organizations were involved in this effort.¹ Concerning gaps in the NBC Desk Log, officials from DOD's Office of the Special Assistant for Gulf War Illnesses said that about 200 pages of log entries may have been produced during the Gulf War. However, thus far, that office has only been able to locate 37 pages. Officials from that office believe the remaining log pages were destroyed as part of an office clean out. Nevertheless, the DOD Inspector General's Defense Criminal Investigative Service has an investigation underway to examine these gaps. Five veterans' organizations have also been tracking this log issue as part of their overall efforts to gather data on Gulf War illnesses. Table 1 summarizes the efforts various organizations have underway to address these issues.

¹Numerous other federal and private organizations have conducted medical research into the potential causes of the symptoms being reported by Gulf War Veterans. Many of these organizations are identified in our report entitled Gulf War Illnesses: Improved Monitoring of Clinical Progress and Reexamination of Research Emphasis Are Needed (GAO/NSIAD-97-163, June 23, 1997).

Table 1: Organizations Studying Gulf War Illnesses

Issues	Federal groups ^a							
	OSAGWI	PAC	Senate Veterans' Affairs Committee	GAO	ATSD(IO)	Army IG	CIA IG	CIA PGW Illness Task Force DOD IG
Identifying chemical exposure incidents								
Identifying incidents in which U.S. personnel were exposed	X	X	X	X	X	X	X	X
Examining methods for identifying and reporting such incidents	X	X	X	X	X	X	X	
Disclosing chemical exposure incidents to the public	X	X		X			X	X
Complying with laws governing classified information								
Analyzing laws governing the handling of classified information		X	X					
Assessing responsibility for any legal violations			X					X
Custody of information								
Examining the custody of information concerning chemical weapons	X	X	X					
Assessing changes to improve the custody		X	X					
Investigating gaps in chemical logs								
Disclosing CENTCOM procedures in place to record incidents in NBC logs				X				X
Identifying instances of noncompliance with procedures								
Determining changes for reporting NBC incidents								
Contacting personnel responsible for maintaining records on chemical weapon incidents	X			X				X

Private groups^a

National Gulf War Resource Center	Desert Shield/Storm Association ^b	VetCenter	Northwest Vets for Peace	Desert Storm Justice Foundation	GulfWatch
	X				
X		X	X	X	X
X		X		X	X
X		X	X	X	X
	X	X			
	X	X			
X		X		X	X
X				X	X
	X				
				X	X
X		X		X	X
X				X	X
X		X		X	X

(continued)

Issues	Federal groups ^a								CIA PGW Illness Task Force	DOD IG
	OSAGWI	PAC	Senate Veterans' Affairs Committee	GAO	ATSD(IO)	Army IG	CIA IG			
Analyzing procedures for archiving information on possible exposure to chemical agents										X
Identifying lessons learned for reporting and archiving information on chemical incidents										
Reconstructing gaps in chemical incident reporting										
Expected Reporting Date	TBD ^c	10/97		3/98	TBD	TBD	10/97	10/97	TBD	TBD

Private groups^a

National Gulf War Resource Center	Desert Shield/Storm Association ^b	VetCenter	Northwest Vets for Peace	Desert Storm Justice Foundation	GulfWatch
				X	X
X				X	X
X		X		X	X
TBD	N/A ^d	TBD	TBD	TBD	TBD

Note: OSAGWI, Office of the Special Assistant for Gulf War Illnesses; PAC, Presidential Advisory Committee on Gulf War Veterans' Illnesses; GAO, General Accounting Office; ATSD(IO), Assistant to the Secretary of Defense for Intelligence Oversight; IG, Inspector General; CIA, Central Intelligence Agency; PGW, Persian Gulf War; CENTCOM, U.S. Central Command; NBC, nuclear, biological, and chemical.

^aThe level of effort among the various groups studying Gulf War illnesses issues varies. Federal organizations, for the most part, have studies or investigations of these issues. For the most part, veterans groups are collecting and analyzing information, making Freedom of Information Act requests, and collecting media information in their role of keeping veterans informed of pertinent developments.

^bThe Association did not provide detailed information on the specific issues it was reviewing.

^cTo be determined.

^dThe Association does not plan to issue a report.

Examinations of the Potential Exposure of U.S. Service Personnel to Chemical Warfare Agents

Eight federal entities and six veterans organizations have been involved in examining the potential exposure of U.S. service personnel to chemical warfare agents. In the federal sector, examinations are underway by DOD's Office of the Special Assistant for Gulf War Illnesses, the Assistant to the Secretary of Defense for Intelligence Oversight, the U.S. Army Inspector General, and Director of the Central Intelligence's Persian Gulf War Illnesses Task Force. Some of the activities of these federal organizations are being monitored by four additional organizations: the Presidential Advisory Committee on Gulf War Veterans Illnesses, the Central Intelligence Agency Inspector General, the Senate Committee on Veterans' Affairs Investigative Team, and the General Accounting Office. Some of these efforts are scheduled to be completed in 1997 while others will take longer. The efforts included reviews of records maintained during the Gulf War to identify potential chemical exposure incidents; evaluations of the

adequacy of the federal government's response to information on potential exposures to chemical agents, assessments of the models being used for studies of chemical incidents, and evaluations of any reported differences in exposures and illnesses between U.S. and other allied forces that participated in the Gulf War.

Of the 26 organizations representing veterans we contacted, 6 veteran organizations were conducting examinations as a part of their efforts to represent the best interests of veterans. As such, these examinations are done on a continuing basis with no established completion dates and generally include the collection and analysis of information from a variety of sources such as contacts with individual Gulf War veterans experiencing health problems, Freedom of Information Act requests made to DOD agencies from other organizations, and media information on the exposure of veterans to chemical weapons.

Examinations Related to Gaps in CENTCOM's NBC Desk Log

In March 1997, the DOD Inspector General's Defense Criminal Investigative Service was tasked by the Deputy Secretary of Defense to lead the effort to determine the circumstances related to gaps in CENTCOM's NBC Desk Log. The Service was directed to follow all leads that can be developed on the location of the original log or copies of it. If the Service cannot locate a full copy of the log, it was expected to determine the reasons. The Service's study had not yet been completed, and the DOD Inspector General declined to comment on the details of this investigation to avoid jeopardizing the investigative effort and protect the privacy of the parties involved.

DOD's Army Inspector General and the Office of the Special Assistant for Gulf War Illnesses (OSAGWI) began efforts to determine the status of the log but discontinued their work once the Defense Criminal Investigative Service took responsibility for this matter. Five veterans organizations are also examining gaps in the NBC Desk Log as part of their overall efforts to gather Gulf War illness information.

To date, OSAGWI has located 37 pages of the NBC Desk Log covering 26 nonconsecutive days from January 17, 1991, through March 12, 1991. OSAGWI officials said that it is not known with certainty how many daily entries were made in the NBC Desk Log. OSAGWI officials stated that, in their opinion, about 200 pages of log entries might have been prepared. Thus, DOD has a hard copy of less than 20 percent of the log pages that may have been prepared to record reported nuclear, biological, or chemical events occurring during the Gulf War. Based on discussions with CENTCOM

officials, OSAGWI officials believe that the remaining pages might have been destroyed as part of an office clean out.

Agency Comments

We obtained oral comments on a draft of this report from DOD and the federal and private groups that provided information contained in the report. While DOD concurred with our findings, it provided several technical comments, including that we clarify DOD's position on the number of Gulf War veterans experiencing health problems and on the maintenance and disposition of NBC Desk Log pages. We revised the draft to reflect DOD's comments. The groups also provided technical comments which we incorporated as appropriate.

Scope and Methodology

To develop a list of examinations of possible exposures to chemical agents and gaps in CENTCOM's NBC Desk Log as well as obtain information on each examination's objectives and scope, we focused our search for ongoing examinations on three types of organizations located in the United States: federal entities, research organizations such as RAND, and veterans organizations. We did not attempt to evaluate the quality or cost of the examinations being conducted or to identify gaps in or duplication of, efforts among the examinations. To avoid jeopardizing the Defense Criminal Investigative Service's ongoing investigation related to the NBC Desk Log, we limited our examination to general discussions with Service personnel on the objectives of their investigation.

We searched Internet databases, contacted organizations with highly publicized efforts, and asked their representatives about other organizations potentially doing examinations.

We obtained information from the following 18 federal entities about their efforts, if any, in conducting examinations: the Presidential Advisory Committee on Gulf War Veterans' Illnesses; DOD's Office of the Special Assistant for Gulf War Illnesses; the Senate Committee on Veterans' Affairs; the General Accounting Office; the Department of Veterans Affairs; the Department of Health and Human Services; the Central Intelligence Agency Persian Gulf War Illness Task Force; the Defense Intelligence Agency Persian Gulf Focus Group; the Assistant to the Secretary of Defense for Intelligence and Oversight; the Institute of Medicine; and the Gulf War Illness Directorate of the National Security Council. We also contacted the Inspector General offices at the Departments of Defense, the Army, Navy, and the Air Force; the Marine Corps; the Joint Chiefs of

Staff; and the Central Intelligence Agency to determine if they were performing active examinations or other activities. In addition, we contacted the United Nations Special Commission on Iraq, which has been conducting on-site investigations of Iraq's chemical and biological capabilities.

We also contacted 10 research organizations that have previously done analyses of defense policy and national security issues to determine whether they had any efforts in the two areas of interest. We contacted the MITRE Corporation; the American Enterprise Institute; the Brookings Institution; the Army War College Strategic Studies Institute; the Cato Institute; the Center for Defense Information; the Center for National Policy; the Center for Strategic and International Studies; the Heritage Foundation; and the RAND Corporation.

To identify veterans organizations examining chemical exposures and the gaps in the NBC Desk Log, we searched several Internet databases, obtained a list of national veterans' service organizations from the Department of Veterans' Affairs, and identified additional veterans organizations by asking representatives of organizations we contacted about other organizations that might be doing examinations. We also asked officials in the Office of the Secretary of Defense, the military services, the DOD legislative liaison offices, and defense agencies that administer Freedom of Information Act requests to identify organizations receiving documents pertinent to these topics under the act. We subsequently contacted 26 veterans organizations that we identified and inquired about any examinations that they were conducting regarding the possible exposure of personnel to chemical weapons and/or gaps in CENTCOM's the NBC Desk Log.

We conducted our work from May to September 1997.

As agreed with your staff, unless you publicly announce this report's contents earlier, we plan no further distribution until 7 days after its issue date. At that time, we will send copies of this report to the Chairman, House Committee on Veterans' Affairs, Chairmen and Ranking Minority Members, Senate and House Committees on Appropriations; the Secretaries of Defense, the Army, the Navy, and the Air Force; and the Chairman, Joint Chiefs of Staff. Copies will also be made available to others on request.

Please contact me at (202) 512-5140 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink that reads "Mark E. Gebicke". The signature is written in a cursive style with a large, stylized "M" and "G".

Mark E. Gebicke
Director, Military Operations
and Capabilities Issues

Contents

Letter		1
Appendix I		14
Examinations of	Examinations Conducted by Federal Entities	14
Exposure of U.S.	Examinations Conducted by Veterans Organizations	23
Personnel to		
Chemical Warfare		
Agents During the		
Gulf War and Gaps in		
CENTCOM's NBC		
Desk Log		
Appendix II		28
Major Contributors to		
This Report		
Table	Table 1: Organizations Studying Gulf War Illnesses	4

Abbreviations

ATSD(IO)	Assistant to the Secretary of Defense (Intelligence Oversight)
CENTCOM	U.S. Central Command
CIA	Central Intelligence Agency
DOD	Department of Defense
NBC	nuclear, biological, and chemical
OSAGWI	Office of the Special Assistant for Gulf War Illnesses

Examinations of Exposure of U.S. Personnel to Chemical Warfare Agents During the Gulf War and Gaps in CENTCOM's NBC Desk Log

A total of 15 federal and private organizations were examining the potential exposure of U.S. personnel to chemical or biological warfare agents and the gaps in U.S. Central Command's (CENTCOM) Nuclear, Biological, and Chemical (NBC) Desk Log. The objectives, methodology, and completion dates for each examination are described below.

Examinations Conducted by Federal Entities

Nine federal entities had efforts underway either involving the potential exposure of U.S. personnel and/or were examining gaps in CENTCOM's NBC Desk Log. Two of these organizations (the Office of the Special Assistant for Gulf War Illnesses and the Senate Veterans' Affairs Committee) were examining both issues.

Office of the Special Assistant for Gulf War Illnesses

The Office of the Special Assistant for Gulf War Illnesses was established by the Deputy Secretary of Defense in November 1996. The Office's mission is to ensure that (1) Gulf War veterans are appropriately cared for, (2) the Department of Defense (DOD) is doing everything possible to understand and explain Gulf War illnesses, and (3) DOD puts into place all required military doctrine and personnel and medical policies and procedures to minimize any future problem from exposure to biological and chemical agents and other environmental hazards. As the scope of the Office's tasks became more defined and the amount and complexity of work increased, the Office's original staff of 20 employees was increased to its present level of 190. The 190 staff members consist of 18 DOD servicemembers, 9 DOD civilians, and 163 contractor personnel. Almost one-half of the staff members are part of the Investigation and Analysis Directorate, whose mission is to identify what happened before, during, and after the Gulf War as it relates to various potential causes of illnesses and to potential future force impacts. The remainder provide administrative, analytic, and automation support; technical management and administration of the website GulfLINK; database and security management; public affairs services; document control and archiving; support to the Presidential Advisory Committee on Gulf War Veterans' Illnesses; legal services, legislative affairs, veterans liaison, and health and medical benefits support; correspondence and electronic mail response services; and notification of potential exposure mailings.

The Office is, among other things, encouraging veterans to participate in DOD's Comprehensive Clinical Evaluation Program and the Department of Veterans' Affairs Gulf War Registry Examination Program. To satisfy its other missions, the Office receives information on potential exposure

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

incidents from a variety of sources, including the military services, the intelligence community, and unified commands such as CENTCOM and the Special Operations Command. The Office also conducts searches of archives and record depositories and conducts interviews with subject matter experts, military and civilian officials, and veterans. The Office participates in government interagency deliberations and oversight of government research of Gulf War illnesses to ensure information sharing and coordination of activities across the executive branch. We did not evaluate the effectiveness of this activity.

At the time we completed our fieldwork, the Office was examining 44 incidents. Of these incidents, 22 involved potential exposures to chemical and biological warfare agents, and 22 concerned potential environmental and occupational exposures and medical issues relating to immunizations, preventive drug treatment, stress, infectious agents, and other potential causes of illness. The Office has issued 10 reports—8 case narratives, 1 information paper, and 1 status report. Of the eight narratives, five are associated with potential chemical exposures at the Khamisiyah ammunition site in Iraq, the port of Al Jubayl in Saudi Arabia, and Camp Kuwait. The other narratives discuss the analysis of a piece of metal alleged to be from a Scud missile, Marine Corps' forces movement through minefields on the Iraqi border, and suspected exposure of a veteran to a mustard agent. The information paper deals with the capabilities and performance of the Fox chemical and biological agent detection vehicle. A status report was provided to the DOD Inspector General that discusses the generation, transportation, storage, and disposition of CENTCOM's NBC Desk Log. The Central Intelligence Agency (CIA) and the Institute for Defense Analysis have issued companion reports to the Office's case narratives on the Khamisiyah incident.

The Office views case narratives as interim reports that contain information about the incidents. The narratives are not final products; as the Office receives additional information on an incident, it intends to refine the respective narratives. As an example of its ongoing investigative process, the Office has issued two separate versions of its case narrative on the Khamisiyah incident in February and July 1997. During April, the February narrative was refined to facilitate retrieval of supporting documents through GulfLINK. Work is still underway, and there is no scheduled completion date for the Office's operations.

Presidential Advisory Committee on Gulf War Veterans' Illnesses

In December 1996, the Presidential Advisory Committee on Gulf War Veterans' Illnesses issued its final report, culminating 16 months of work.¹ The Committee's study covered a wide range of Gulf War illness issues, including medical care being provided to veterans of the Gulf War; chemical and biological warfare agent examinations; and coordination of research programs for Gulf War illnesses among government agencies. In January 1997, the President extended the duration of the Committee for an additional 10 months. One of the two principal roles assigned to the Committee at that time was to oversee the ongoing Office of the Special Assistant for Gulf War Illnesses (OSAGWI) examination into possible chemical or biological warfare agent exposures during the Gulf War. In February 1997, the President tasked the Committee to evaluate the adequacy of the government's response to the implications of recently declassified documents associated with chemical munitions at the Khamisiyah storage depot. Specifically, the President asked the Committee to concentrate on (1) when the U. S. intelligence and military communities knew that chemical munitions were present at Khamisiyah and that U.S. forces may have been exposed to chemical agents and (2) whether the government's response was sufficient once this information was known.

The Committee issued its Supplemental Letter Report in April 1997. The letter report reiterated a conclusion made in the final report that the evidence of a chemical agent release at Khamisiyah was overwhelming. The letter report also stated that (1) substantial mismanagement and lack of communication among elements of the military and intelligence committees existed, (2) evidence existed before the initiation of war fighting that constituted reasonable cause for concern that Khamisiyah was an ammunition storage facility that contained chemical munitions, (3) executive branch departments and agencies made no serious effort to examine the possibility of chemical warfare agent exposure to U.S. troops at Khamisiyah until late 1995, and (4) DOD's consistent denials until June 1996 of the possibility of exposure of U.S. troops to chemical warfare agents cannot be justified.

Regarding its oversight of OSAGWI's examination into possible chemical or biological warfare agent exposures during the Persian Gulf War, the Committee's supplemental letter report addressed three issues: (1) the modeling used for plume analysis of chemical agents and other debris released into the atmosphere after destruction of the Khamisiyah

¹Final Report: Presidential Advisory Committee on Gulf War Veterans' Illnesses (December 31, 1996). We reviewed the work of the Committee in a recent report: Gulf War Illnesses: Improved Monitoring of Clinical Progress and Reexamination of Research Emphasis Are Needed (GAO/NSIAD-97-163, June 23, 1997).

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

ammunition storage area, (2) the Committee's access to information held by DOD, and (3) standards for evaluating detection or exposure incidents. In its April 1997 Supplemental Letter Report, the Committee stated that there were no insurmountable obstacles to completing the modeling for the Khamisiyah site and barriers raised to date by CIA and DOD did not warrant continued delays in completing this project.

The letter report also criticized the criteria used by OSAGWI for determining the credibility of reported detection or exposure incidents, stating that OSAGWI used an inappropriately high standard of proof for these matters. The Committee stated that DOD should move quickly toward making conclusions about the incidents under examination.

Since the time of its extension, the Committee has convened public hearings in Salt Lake City, Utah; Charleston, South Carolina; Memphis, Tennessee; Buffalo, New York; and Alexandria, Virginia. The Committee's final report is due to the President in October 1997.

Senate Committee on
Veterans' Affairs Special
Investigative Unit on
Persian Gulf War Illnesses

The Senate Committee on Veterans' Affairs, created its Special Investigative Unit in February 1997. The Unit's work is focusing on three major areas: (1) DOD and other agency actions taken before, during, and after the Gulf War that may relate to the current health problems of Gulf War veterans; (2) Department of Veterans' Affairs compensation, claims processing, and health treatment issues; and (3) review of current scientific research, environmental risks, treatment options, and potential preventive actions connected with veterans' health.

The Unit is assessing such efforts as the adequacy of DOD's preparedness for and intelligence on Iraqi nuclear, biological, and chemical warfare capabilities; the models being used for plume analyses of potential chemical exposures incidents, such as the destruction of the Khamisiyah storage facility; and its record-keeping activities during and after the Gulf War, including chemical weapons logs and medical records. In carrying out these tasks, the Unit is assessing the efforts of DOD, the Department of Veterans' Affairs, the Presidential Advisory Committee on Gulf War Veterans' Illnesses, and others.

The Unit has about 20 full-time personnel, including detailees from other federal agencies, as well as a number of consultants. The Unit expects to complete its work and issue a Committee report in March 1998.

General Accounting Office

Including this report, we have issued six reports since 1995 on DOD's ability to protect and treat its forces from chemical and biological agents and operate its facilities should they become contaminated by agents.² In March 1996, we reported that DOD's emphasis given to chemical and biological defense matters was insufficient to correct problems that surfaced during the Gulf War. We reported that equipment, training, and medical shortcomings persisted and were likely to result in needless casualties and a degradation of U.S. war-fighting capabilities. In May 1997, we reported that while DOD's medical surveillance capabilities had improved somewhat since the Gulf War, DOD continued to experience problems in the Bosnia deployment. Specifically, DOD had not (1) established an accurate system to track all personnel who deployed, (2) given required postdeployment medical assessments to all personnel, and (3) maintained accurate medical records to identify medical visits during deployment and documentation of personnel receiving the tick-borne encephalitis vaccine. We have also issued three classified reports involving chemical and biological agent defense.

Besides our completed work, we recently began two efforts involving potential exposures of personnel to chemical and other agents during the Gulf War that may be contributing to Gulf War illnesses. In one effort, we are evaluating the experiences of allied forces that participated in the Gulf War and their reported incidence of illnesses, if any. In the second effort, we are evaluating the adequacy of current U.S. policies, procedures, and technologies to (1) defend against single, repeated, or sustained exposure to low levels of chemical warfare agents and (2) identify, prepare for, and defend against the possible adverse effects of chemical warfare agent exposure in combination with other compounds found on the battlefield. We have not established a timeframe for completing this work.

Assistant to the Secretary
of Defense for Intelligence
Oversight

In September 1996, the Deputy Secretary of Defense directed the Assistant to the Secretary of Defense for Intelligence Oversight to (1) investigate what information concerning Khamisiyah and similar chemical warfare sites in Iraq was available to DOD prior to the destruction of the Khamisiyah facility by U.S. forces, (2) ascertain what DOD did with that information, and (3) determine whether any procedure for handling such information should be changed.

²In addition to this report, also see Chemical and Biological Defense: Emphasis Remains Insufficient to Resolve Continuing Problems ([GAO/NSIAD-96-103](#), Mar. 29, 1996); Defense Health Care: Medical Surveillance Improved Since Gulf War, but Mixed Results in Bosnia ([GAO/NSIAD-97-136](#), May 13, 1997); and three classified reports on the defense of Korea, biological agent defense, and protection of critical ports and airfields.

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

Because of the large number of documents relevant to the examination, DOD awarded a \$2.5 million contract to the MITRE Corporation in December 1996 to organize and analyze the documents and produce an independent study. The purpose of the study was to determine what information concerning Iraqi chemical warfare weapons, doctrine, units, sites, intentions, uses, and events was known or not known within DOD and how the information was used or not used during the period from the Iraq invasion of Kuwait to the withdrawal of all forces from Iraq and Kuwait.

MITRE staff are reviewing millions of documents at all security classifications from several government sources, including the Defense Intelligence Agency; National Security Agency; Departments of State, the Army, the Navy, and the Air Force; CIA; DOD's Gulf War Declassification Project; and CENTCOM. In addition, MITRE conducted about 30 interviews with individuals from DOD and the national security and intelligence communities to obtain information. MITRE's final report will be classified. A final report will be provided to the Assistant to the Secretary of Defense for Intelligence Oversight, who will then provide it and his own findings and recommendations to the Deputy Secretary of Defense.

Army Inspector General

In September 1996, the Secretary of the Army directed the Army Inspector General to determine the facts surrounding the demolition of ammunition at Khamisiyah, Iraq in March 1991 by U.S. Army forces. The Inspector General's inquiry was to focus on whether (1) the presence of chemical munitions was detected at the time the ammunition was destroyed, (2) such information was reported, and to what level, and (3) appropriate force protection measures were taken during demolition operations.

In October 1996, the Secretary of the Army issued a supplemental directive to the Army Inspector General. The Inspector General was directed to determine (1) the weapons that were destroyed; (2) the personnel who participated in the destruction; (3) the potential exposure of those personnel to chemical agents; (4) other personnel who may have been exposed to chemical agents due to the possible chemical agent release, considering applicable weather patterns at the time; (5) any other significant events pertaining to this incident; and (6) whether similar operations were conducted elsewhere.

For the inquiry, a team of four Army Inspector General officers gathered information and documents from the Gulf War Declassification Project (on intelligence, health policy, and operations); the Investigation and Analysis

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

Directorate, Office of the Special Assistant for Gulf War Illnesses; various Army commands and agencies; CIA; the Defense Intelligence Agency; and individual soldiers, veterans, and civilians. The team collected over 2,000 documents, 300 photographs, 4 video tapes, and 1 audio tape. In addition, the team conducted approximately 700 interviews with active duty servicemembers, veterans, retirees, and civilians. About one-half of the interviews were sworn and recorded. The remainder were documented with memoranda for the record.

The Army Inspector General team has completed the inquiry and is currently in the final stages of writing the report, analyzing and cross-referencing available data, and coordinating possible results and conclusions with the appropriate agencies and individuals. It is anticipated that a report will be approved for release in October 1997.

CIA Inspector General

In October 1996, the Director of Central Intelligence requested that the CIA Inspector General assess the allegations made by two former CIA employees concerning the handling of information about the possible exposure of U.S. forces to chemical weapons during the Persian Gulf War. The allegations were that (1) the CIA had hidden, and continues to hide, evidence of the exposure of U.S. forces to chemical weapons during the Gulf War; (2) CIA officials tried to hinder the former employees' inquiry about this exposure; (3) CIA employees avoided reviewing the evidence uncovered concerning the exposure; and (4) the careers of the two former employees were effectively destroyed because of their insistence on pursuing an inquiry about the exposure of U.S. forces to chemical weapons during the Gulf War. The allegation that CIA hid information related to Gulf War Illnesses was based on three specific concerns: (1) that the CIA was not releasing relevant documents in a timely fashion, (2) that CIA managers had directed the removal of documents from an Internet website on Gulf War illnesses run by DOD, and (3) that the CIA had not provided one of the former employees with documents requested under the Freedom of Information Act.

In addition, in February 1997, the President asked the Presidential Advisory Committee on Gulf War Veterans' Illnesses to address several questions regarding the Khamisiyah ammunition storage depot. As a result of the President's directive to the Committee to take full account of evidence disclosed by the CIA Inspector General's ongoing review, a CIA Inspector General assessment team specifically focused on CIA's handling

of information related to Khamisiyah in order to contribute to resolution of the President's questions.

A nine-person assessment team has reviewed over 6,000 documents and interviewed over 175 individuals. As of September 1, 1997, two draft reports, one concerning the allegations of the two former employees and another on the handling of information related to Khamisiyah, had been distributed to CIA components so that they may provide comments. Final reports are expected to be issued by October 31, 1997.

**Director of Central
Intelligence Persian Gulf
War Illnesses Task Force**

The Task Force, established in February 1997 by the Acting Director of Central Intelligence, was chartered to provide intelligence support to the various U.S. government entities that are examining Gulf War illnesses. The Task Force staff of 50 personnel are from the intelligence community—the CIA, the Defense Intelligence Agency, the National Security Agency, the National Imagery and Mapping Agency, and DOD's Office of the Special Assistant for Gulf War Illnesses. As the Task Force completed some of its initial efforts, many intelligence community personnel returned to their respective components; however, they continue to be principal points of contact to the Task Force for specific issues. The Task Force is now composed of personnel from CIA, the National Imagery and Mapping Agency, and the Office of the Special Assistant for Gulf War Illnesses. Responsibilities of the Task Force include (1) reviewing previous search criteria and conducting additional searches as required; (2) managing and accelerating current and ongoing document declassification efforts; (3) ensuring that DOD and others can retrieve related classified information quickly; (4) supporting ongoing CIA modeling efforts; (5) providing analyses of relevant information; and (6) developing a comprehensive strategy for communications with DOD, the National Security Council, the Presidential Advisory Committee on Gulf War Veterans' Illnesses, appropriate congressional committees, the media, and the public.

According to the Special Assistant to the Director of Central Intelligence for Persian Gulf War Illnesses Issues, to meet its responsibilities, the Task Force has reviewed previous search criteria on Gulf War illnesses, conducted broader searches, and ensured that classified material was passed to DOD and others. The broader approach was designed, in part, to discover any evidence about the potential exposure of U.S. forces to chemical weapons and other hazards. The Task Force's search efforts captured over 1 million documents. The Task Force used an analytical

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

team to prepare three public papers: Khamisiyah: A Historical Perspective on Related Intelligence, April 1997; Update on Potential Mustard Agent Release at Ukhaydir Ammunition Storage Depot, September 1997; and Modeling the Chemical Warfare Agent Release at the Khamisiyah Pit, September 1997.

In its April 1997 paper, the Task Force focused on determining what the intelligence community knew about Iraqi storage of chemical weapons, particularly the storage of such weapons at the Khamisiyah ammunition site. Questions pursued included (1) what and when did the intelligence community know about the possibility of chemical weapons at this site and (2) what did the intelligence community, and when, do internally and externally, with the information collected and analyzed. Its paper provides details about the intelligence community's knowledge of Khamisiyah before, during, and after the war. Key issues include problems with multiple databases; limited sharing of sensitive, but vital, information; and incomplete searches of files while preparing lists of known or suspected chemical warfare facilities. The Task Force is also conducting analyses related to potential causes of Gulf War illnesses, including biological, chemical, radiological, environmental factors, and foreign-reported illnesses.

The Task Force has been working with DOD to produce the plume-modeling results. The Task Force was expected to complete its work by April 1997; however, as of October 1997, its work was still ongoing.

DOD Inspector General

In its efforts to identify the causes of a number of illnesses being suffered by Gulf War veterans, the Office of the Special Assistant for Gulf War Illnesses learned that not all of the pages of the NBC Desk Log maintained in CENTCOM's J-3 Operations Center during the war could be found. The Office has located 37 pages of the log, covering 26 nonconsecutive days of operations from January 17 to March 12, 1991. DOD estimated that approximately 200 pages of the log could be expected to exist. Thus, DOD has paper copies of only a small portion (less than 20 percent) of the pages of the Central Command NBC Desk Log that could have been generated during the Gulf War.

On March 3, 1997, the Deputy Secretary of Defense directed the DOD Inspector General to take over this inquiry and carry it to conclusion. Specifically, the Deputy Secretary directed the Inspector General's office

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

to follow all leads that could be developed on the location of the original log or copies, in either electronic or hard copy versions, and gather all originals and copies that can be located. If a full copy of the log cannot be located, the Inspector General is to explain why.

The Defense Criminal Investigative Service of DOD's Inspector General's office is currently examining this issue. The examination is being directed by headquarters staff, and the examination team consists of senior investigators supported by a staff of auditors and investigative support personnel. The team's efforts generally included collecting and analyzing the investigative record created by the Office of the Special Assistant for Gulf War Illnesses, including numerous transcribed interviews with watch officers assigned to man the headquarters NBC Desk during the war; interviews of other persons who may have had access to the log after the war; and many telephone and written requests for information from sources throughout DOD. The team also conducted over 185 interviews with available witnesses who were involved in the creation of the CENTCOM NBC Desk Log in Riyadh, Saudi Arabia, and those in possession of the log at CENTCOM in Tampa, Florida, after the conclusion of the Gulf War. The team also reviewed over 700,000 pages of documents at the National Archives, 22,000 pages at CENTCOM, and over 100 computer disks.

This effort was designated as the Defense Criminal Investigative Service's top priority and was to be completed as quickly as possible without sacrificing the thoroughness of the examination.

Examinations
Conducted by
Veterans
Organizations

We identified six veterans organizations that were reviewing issues relating to the exposure of U.S. military personnel to chemical agents or gaps in CENTCOM's NBC Desk Log. Five groups were reviewing both issues. While the federal organizations have performed extensive studies or inquires, the veterans organizations for the most part are collecting and analyzing information, making Freedom of Information Act requests, and collecting media information in their role of keeping veterans informed of pertinent developments.

National Gulf War
Resource Center, Inc.

In 1995, the National Gulf War Resource Center, a nonprofit organization located in Washington, D.C., was founded to support the efforts of 24 grass roots Gulf War veterans organizations in the United States and Great Britain working to assist veterans affected by the war. The Center serves as a clearinghouse receiving information from veterans; the Center's

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

member and veteran service organizations; government agencies; and the media. It then disseminates the information to member organizations and interested groups to assist them in their efforts to assist veterans.

Starting in 1995, the Center began researching and documenting chemical warfare agent detection, exposure, and injury incidents during the Gulf War as well as the issue of the missing, misplaced, or destroyed chemical logs. The Center's objectives are to locate, obtain, and review documents, such as chemical logs, relevant to the exposure of U.S. service personnel to chemical warfare agents. This work was intended to provide Gulf War veterans with evidence of chemical agent exposure, if any, so that they could obtain appropriate health care and compensation and offer suggestions on how to improve chemical warfare agent detection and protection.

To achieve these objectives, the Center receives eyewitness accounts from veterans to determine which units may have been exposed to chemical warfare agents and then sends requests for relevant documentation under the Freedom of Information Act to the appropriate commands and units. In addition, the Center reviews other documentation obtained from Congress, the media, DOD, and other sources to obtain additional information about potential exposures and the location of relevant corroborating documentation.

According to a representative of the Center, its work has resulted in the public release of previously classified information that contradicted information previously released by DOD. The representative also said that, as a result of the Center's work, (1) DOD confirmed that Gulf War personnel were potentially exposed to chemical warfare agents, (2) DOD and the Department of Veterans' Affairs have begun to offer some limited medical screening for potential toxic exposures experienced during the Gulf War, and (3) DOD and the Department of Veterans' Affairs have launched new medical studies following up on private sector studies showing a causal link between chemical exposures and illnesses among Gulf War veterans. The Center's examination is an ongoing effort with no established completion date.

Operation Desert
Shield/Desert Storm
Association

The Operation Desert Shield/Desert Storm Association, located in Odessa, Texas, was formed in November 1990 to collect and archive any and all information related to the Gulf War, including the exposure of service personnel to chemical warfare agents and the circumstances surrounding

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

gaps in the CENTCOM NBC Desk Log. The Association was formed to attempt to prevent a recurrence of the problems that occurred during the Vietnam War with the government's handling of exposures of military personnel to Agent Orange. The founding members believed that the major problem with the Agent Orange situation was that no entity outside the government kept any documentation during the Vietnam War.

The Association's mission is accomplished through obtaining government and private documents from worldwide sources, identifying and collecting newspaper and magazine articles, and recording television and radio presentations related to the Gulf War. The Association plans to continue its examination into all Gulf War issues, including the use of, and exposure to chemical and biological weapons in the Persian Gulf and gaps in CENTCOM's NBC Desk Log. Negotiations are underway to build a permanent archival, research, and museum facility to provide information resources on all aspects of the Persian Gulf War to anyone requesting such information.

In 1991, from its contacts with sick veterans, the Association determined that there were five areas of concern affecting the health of service personnel: human changes to the normal environment in the Gulf, chemical and biological weapons exposure, radiation exposure, parasitic infections, and the use of investigational drugs and vaccines. Since 1992, Association representatives have testified at U.S. and overseas meetings and hearings pertaining to the Gulf War illnesses. Also, in January 1992, the Association co-sponsored the first "mystery illnesses" conference.

The VetCenter

In February 1994, the VetCenter located in Patchogue, New York, was formed to determine why many Gulf War veterans became ill after the war. More specifically, the VetCenter is examining the possible exposure of U.S. personnel to chemical warfare agents, including identifying incidents where personnel were exposed and disclosing this information to the public.

With respect to CENTCOM's NBC Desk Log, the VetCenter has been examining the chain of custody and instances of noncompliance with incident recording procedures. This is being accomplished through the correlation of units, locations, and the extent of illnesses experienced by veterans in various areas. Information is collected primarily from veterans who served in the Gulf War through the use of surveys posted on the VetCenter's Internet site and through mailings. This information is

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

subsequently reviewed and followed up on through telephone calls, electronic mail, and letters for validation. Veterans are asked to back up their statements by submitting photos and other documentation. This information is made available to organizations such as congressional committees and individuals who are examining the issue. This work is an ongoing effort with no established completion date.

**The Northwest Veterans
for Peace**

The Northwest Veterans for Peace, located in Portland, Oregon, began helping Gulf War veterans and their families obtain medical care because the organization believed that the government was not promptly attending to veterans returning to the United States. In 1993, as a result of a congressional request, the organization began testing saliva and urine of veterans and their families from an Oregon National Guard unit that deployed to the Gulf. In addition, the organization asked veterans and their families to complete a questionnaire covering their illnesses and their jobs, locations, and time periods in the Gulf. The questionnaire also asked about any incident occurring in the Gulf that they believed was either a chemical or biological incident. In the summer of 1997, the organization sent follow-up questionnaires to the veterans to identify any changes in their health or the health of their families. The organization is still receiving questionnaire responses from the veterans. The organization has not established a completion date for this effort.

**Desert Storm Justice
Foundation**

In February 1994, the Desert Storm Justice Foundation, located in Oklahoma City, Oklahoma, was created as a nonprofit organization to provide support to sick veterans and their families. The Foundation also serves as a clearinghouse for information from both government and private sources about the possible exposure of U.S. personnel to nuclear, biological, and chemical warfare agents during the war, widely disseminating the information to interested groups and individuals. The Foundation's efforts also include gathering information on gaps in CENTCOM's NBC Desk Log. This is an ongoing examination with no established completion date.

GulfWatch

In March 1991, GulfWatch, located in Hannibal, Missouri, was created to provide information and documentation to the public regarding what happened before, during, and after the war on a variety of topics, including the possible exposure to U.S. personnel to nuclear, biological, and chemical warfare agents and gaps in CENTCOM's NBC Desk Log. The

Appendix I
Examinations of Exposure of U.S. Personnel
to Chemical Warfare Agents During the Gulf
War and Gaps in CENTCOM's NBC Desk
Log

organization received information from sources in intelligence agencies, from interviews with individuals who served in the war, radio call-in programs, and filing requests for documents under the Freedom of Information Act. The organization disseminates the information obtained to researchers and the media with the objective of providing information on what actually happened during the Gulf War. The overall goal of the organization is to obtain medical care for sick Gulf War veterans and to prevent a recurrence of such problems. The investigative efforts of GulfWatch are ongoing with no established completion date.

Major Contributors to This Report

National Security and
International Affairs
Division, Washington,
D.C.

Carol R. Schuster
Donald L. Patton
Rodney E. Ragan
William J. Rigazio
Raymond G. Bickert
Karen S. Blum

Norfolk Field Office

Steve J. Fox
William L. Mathers

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (202) 512-6061, or TDD (202) 512-2537.**

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

**For information on how to access GAO reports on the INTERNET,
send an e-mail message with "info" in the body to:**

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Address Correction Requested