

GAO

Report to the Chairman, Committee on
Veterans' Affairs, U.S. Senate

February 1993

VETERANS DISABILITY

Information From Military May Help VA Assess Claims Related to Secret Tests



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

National Security and
International Affairs Division

B-251258

February 18, 1993

The Honorable John D. Rockefeller IV
Chairman, Committee on Veterans' Affairs
United States Senate

Dear Mr. Chairman:

This report responds to the former Chairman's request that we examine secret, U.S. military chemical and biological warfare research experiments that exposed service members to hazardous substances. Our objectives were to (1) identify, to the extent possible, all chemical and biological experiments conducted secretly by the military services during the past 50 years; (2) review the Department of Veterans Affairs' (VA) handling of disability claims associated with these experiments; and (3) review the VA's efforts to contact veterans who participated in the experiments and invite them to file claims.

Results in Brief

There were at least three secret chemical experiments conducted between 1942 and 1975: the Navy's and the Army's World War II mustard agent experiments and the Army's incapacitating agent tests of the Cold War era. All of these tests have been declassified by the services since at least 1975.

Because of a lack of data, making decisions on the validity of veterans' disability claims associated with mustard agent experiments has proven to be difficult for VA. This has not been a problem with claims associated with incapacitating agent tests because the Army has the necessary information. Before July 1992, the VA required that veterans prove that their medical problems resulted from their participation in the mustard agent tests. Few veterans, however, could prove this relationship. Thus, until 1992, only 13 of 145 claims for benefits were approved by VA. VA has recently recognized that the veterans' problems may be attributable to the fact that the experiments were conducted secretly, with no provision for medical follow-up testing.

In July 1992 VA revised its adjudicating procedures for these types of claims. To receive compensation, veterans with specific health problems known to be associated with exposure to mustard gas now need only to show that they participated in mustard agent tests. However, because there is only limited information available on test participants, VA will continue to have difficulty deciding whether veterans' claims are valid. VA,

for example, has not been able to validate veterans' claims of participation in mustard agent tests because the services do not have complete information on the test sites, the dates of the tests, and the units involved. Moreover, what information is available is widely dispersed in records held at numerous military locations. No effort has been made to aggregate the existing data.

VA has made other efforts to serve veterans who may not be receiving deserved compensation for their participation in the tests. For example, the agency had the National Academy of Science study the long-term effects of exposure to mustard gas to ensure VA's list of chronic conditions resulting from mustard agent exposure is complete.

VA's only outreach effort to identify veterans involved in these tests was hampered by the limited amount of information available on the testing programs. In this 1991 outreach effort, only 128 veterans out of the thousands that participated could be identified from existing information. Future outreach efforts could be enhanced if the Army and Navy provided VA with all available information on the location of the test sites, the dates of the mustard agent tests, and the units involved.

Background

Since at least World War I, the military has conducted medical, chemical, and biological research using military personnel who have volunteered. This research is done to maintain and protect the health of military personnel who may be exposed to a variety of diseases and combat conditions. Military procedures have long required that the volunteers be fully informed of the nature of the studies in which they participate and the foreseeable risks. However, prior to 1975, these procedures were not always followed.

In hearings conducted by the Senate Veterans' Affairs Committee in June 1991 and the Senate Committee on the Judiciary and the Senate Committee on Labor and Public Welfare in 1975,¹ participants in earlier testing programs testified that they were not informed about the nature of the experiments, the chemicals to be administered, or potential adverse effects. Additionally, the hearings disclosed that, in some tests, the volunteers' medical records were not adequately documented, nor were the volunteers medically followed after the tests. The June 1991 hearings also disclosed that some veterans were having trouble obtaining VA compensation for injuries alleged to have occurred in the testing.

¹Now the Senate Committee on Labor and Human Resources.

Additionally, the Committee expressed concerns about the need to identify participants, inform them of their involvement in tests, and assist them in developing their claims for disability compensation.

Three Secret Experiments Were Conducted, but Army and Navy Lack Complete Information on Participants

We identified three military research projects that were conducted secretly by the services between 1942 and 1975 that exposed service members to hazardous substances. The three projects are as follows: (1) In the World War II era, the U.S. Navy conducted tests of clothing and equipment, exposing sailors to mustard and lewisite agents; (2) in the same era, the U.S. Army tested clothing, equipment, and weapons that exposed soldiers to mustard agent; and (3) in the Cold War era, the U.S. Army's experiments exposed soldiers and some U.S. Air Force personnel to incapacitating agents, such as nerve agents, nerve agent antidotes, and psychochemicals, including lysergic acid diethylamide (LSD). Information, particularly names of participants, for both the Army and Navy's mustard agent tests is limited.

Navy and Army Mustard Agent Tests

At the beginning of World War II, allied forces feared the use of chemical agents, particularly mustard agent, by the Germans and Japanese. At the time, neither the United States nor its allies had developed effective defensive protection against mustard agent. Further, they did not know much about its offensive use under different meteorological conditions—particularly in such tactical areas as the North African desert or the beaches and jungle islands of the Pacific.

Accordingly, the Navy initiated the secret testing of protective clothing and antivesicant (blister) ointments at its Naval Research Laboratory in Washington, D.C., and at the Army's Edgewood Arsenal in Maryland. The Navy's program involved gas chamber tests, in which sailors experienced full-body exposure to mustard agent and lewisite while testing protective clothing, and skin tests, in which small amounts of mustard agent and antivesicant ointments were applied to sailors' forearms.

The Navy did not maintain records for all personnel involved in this testing. It only has listings of the surnames of approximately 2,900 sailors who participated in gas chamber tests conducted at the Naval Research Laboratory, and Navy officials acknowledge that these listings may not be complete. Additionally, Navy officials told us that at least 15,000 and perhaps as many as 60,000 Navy recruits had participated in skin tests

conducted under Navy contract at the University of Chicago. The Navy has no records containing the names of these individuals.

The Army's World War II mustard agent test program similarly tested protective clothing, equipment, and antivesicant ointments. In addition, the Army developed and tested offensive chemical weapons and evaluated the effectiveness and persistency of mustard agents in different environments. Test documents located at the Army's Chemical Research, Development, and Engineering Center document that gas chamber tests and skin tests were conducted at Edgewood Arsenal, Maryland, and that field tests were conducted at 11 locations—Bushnell Field, Florida; Fort Pierce, Florida; Dry Tortugas, Florida; San Jose Island, Panama; Camp Sibert, Alabama; Dugway Proving Grounds, Utah; Camp Polk, Louisiana; Gulfport, Mississippi; El Centro, California; San Carlos, California; and, Fort Richardson, Alaska.

The Army's records of its mustard agent test activities were not kept in a manner that readily identifies soldiers who participated in its World War II chemical tests. However, archival material on the history of Army chemical warfare activities indicates that the number of participants might have been in the thousands.² For example, the records show that 1,002 soldiers were commended for their participation in tests in which they "subjected themselves to pain, discomfort, and possible permanent injury for the advancement of research in protection of our armed forces." The records did not indicate what type of tests these soldiers participated in. Additionally, the same records state that between 200 and 300 soldiers were continuously available at Edgewood and Dugway Proving Grounds to participate in experiments from December 1944 until the end of the war. Again, the records did not indicate the type of tests in which these soldiers participated.

The Army's Incapacitating Agent Tests in the Cold War Era

In 1952, the Army Chemical Corps began a classified medical research program for developing incapacitating agents that continued until 1975. This program involved testing chemicals, including nerve agents, nerve agent antidotes, psychochemicals, irritants, and vesicant agents. The chemicals were given to volunteer service members at Edgewood Arsenal, Maryland; Dugway Proving Grounds, Utah; and Forts Benning, Bragg, and McClellan.

²Rexmond C. Cochrane, "Medical Research in Chemical Warfare," undated, thought to have been written in 1946 (Aberdeen Proving Ground Maryland Archives).

In total, Army documents identify 7,120 Army and Air Force personnel who participated in these tests. The Army's Medical Research and Development Command in Fort Detrick, Maryland, has the names and service numbers of all test participants and listings of the chemicals to which the service members were exposed.

VA Changed Its Criterion for Claims, but They May Still Be Difficult to Validate

Before VA revised its criterion for adjudicating mustard agent claims in July 1992, a veteran had to prove (among other things) that his disability was service connected or a result of injuries or disease incurred or aggravated during a period of military service. Usually medical records of treatment while in the service could be used to substantiate a veteran's claim. However, our review of 145 disability claims from veterans who allege exposure to mustard gas showed that claims were frequently disallowed by VA because veterans could provide no evidence of having been injured by a mustard gas exposure. Recognizing that the confidentiality of these tests could make obtaining such evidence difficult, VA recently provided a less stringent criterion for considering these cases. Specifically, veterans with specific health problems known to be associated with mustard gas exposure will now only have to prove participation in the testing program. However, proving participation may be difficult.

VA Issued Guidance in March 1991

VA issued its original guidance on evaluating claims for compensation from veterans who participated in early military research programs on March 20, 1991. This guidance provided extensive instructions for developing claims from sailors who participated in a Navy World War II program to test and evaluate protective clothing and applications (ointments, powders, etc.) for war gases, particularly mustard gas and lewisite. VA's guidance identified (1) an address for obtaining proof of participation, (2) eight disabilities VA recognized as being related to exposure to mustard gas,³ and (3) the type of information VA needed to develop a mustard gas exposure claim. VA's guidance also included instructions for developing claims from soldiers and airmen who participated in secret Army chemical tests. This guidance was less detailed than that for developing Navy test claims because, at the time, VA knew very little about the Army's testing activities.

³These disabilities are chronic forms of laryngitis, bronchitis, emphysema, asthma, conjunctivitis, keratitis, corneal opacities, and neurasthenia.

VA's March 1991 guidance also directed VA regional offices to begin tracking claims from veterans who alleged participation in secret tests. Prior to then, VA did not track such claims because it ordinarily tracks claims by type of disability, not by how the disability was incurred. Since that time, VA has required its regional offices to forward to VA Headquarters a copy of every rating decision that awards or denies benefits for disabilities alleged to be the result of participation in chemical testing programs. Because VA's adjudication regulations did not cover the special circumstances of veterans involved in secret testing, however, VA stopped processing mustard gas exposure claims in January 1992 and directed the regional offices to hold all claims, pending the development of a new regulation.

Claims Made Under the Old Criterion Were Often Disallowed

In evaluating mustard claims made before July 1992, adjudicators at the VA Regional Offices we visited relied primarily on an analysis contained in the March 1991 guidance. This analysis, prepared by VA's Office of Environmental Medicine and based on a literature search of the immediate and short-term effects of mustard gas exposure, reported that exposure to mustard gas results in an immediate acute injury. Additionally, the analysis stated that any chronic disability related to a mustard agent exposure should appear shortly after the exposure and continue to the present. In this respect, mustard gas disability claims differ little from other service-connected claims because veterans must be able to show that their disability was incurred or aggravated in service.

Accordingly, VA adjudicators looked for such things as evidence of treatment for a mustard gas-related injury during the veteran's active duty, evidence of a chronic disability shown on the veteran's military separation physical records, or a history of treatment for a disability known to be associated with exposure to mustard gas. While evidence of participation in secret tests did not appear to be discounted, the adjudicators primarily looked for evidence of a continuous pattern of treatment for the disability dating back to the veteran's service days. The adjudicators reasoned that, while the origin of a veteran's injury may have been a secret test, any veteran with a chronic disabling injury should be able to show treatment for that injury. Thus, for the 145 claim decisions we reviewed, even where veterans could show evidence of full-body exposure to mustard agent, entitlement to benefits was usually not granted by VA unless the veteran could show some in-service or post-service treatment.

Few veterans exposed to the services' mustard agent testing were able to meet the VA's criterion. Veterans' service medical records often contain no evidence of an acute mustard agent injury at the time of exposure or of a chronic health problem at the time of separation from the service. Additionally, few veterans were able to show any post-service treatment for their claimed conditions that would allow VA claim adjudicators to conclude these conditions were caused by exposure to mustard agent. In total, 97 of the 145 veterans in our review were denied benefits because they could not prove their health problems were caused by exposure to mustard agent.⁴ For most of these veterans, the first evidence of the injury appeared many years after their military service when they were at an age when these same ailments typically show up in the general population. Further, only a few of the veterans alleged that their health problems were long-term in nature, dating back to their active military duty.

VA Revised Its Criterion

On July 31, 1992, VA issued a new regulation in which it acknowledged that veterans exposed to mustard agent during secret tests faced a potentially insurmountable disadvantage when attempting to establish entitlement to compensation. VA believed that because of the secret nature of the testing, veterans might be disadvantaged in proving their entitlement to benefits. The Department reasoned that because medical records associated with the tests were generally unavailable and no long-term follow-up examinations were conducted, service medical records for individuals who had participated would probably not show evidence of the acute effects of their exposure. Additionally, VA stated that physicians who may have treated these veterans for chronic effects more than 40 years ago have almost certainly retired making it impossible to establish that a chronic disability had existed since the exposure to mustard.

The new regulation recognizes seven ailments known to be associated with exposure to mustard agent.⁵ Veterans with a chronic form of one or more of these conditions who can document a full-body exposure to mustard gas will not have to prove that the disease first manifested itself during the veteran's military service. VA is now evaluating all the claims that have been on hold in its regional offices. Additionally, VA is reviewing all previously denied claims.

⁴What follows are other reasons claims were disapproved: a veteran claimed a health problem not known to be caused by mustard agent exposure—14; a VA medical examination found that a veteran did not have the claimed condition—9; a veteran failed to respond to a VA request for information—7; other reasons—5.

⁵These disabilities are the same as those in the March 20, 1991, guidance except neurasthenia was dropped from the listing.

Revised VA Criterion Is Less Demanding, but Proving Participation Will Be Difficult

Under the July 1992 regulation, VA will presume certain chronic problems were caused by exposure. However, VA officials acknowledge that receiving benefits could ultimately hinge on the veteran's ability to verify participation in one of the tests.

Proving participation in secret testing will likely pose a significant problem for most veterans. Documentation listing test participants is sketchy or nonexistent. The Naval Research Laboratory has established a point of contact to assist the 2,900 veterans who participated in Navy-sponsored gas chamber tests. However, points of contact to assist other mustard agent test participants have not been established.

The likelihood of finding the names of all test participants appears remote. For example, we researched the records from one Army mustard agent project conducted on San Jose Island, Panama, between 1943 and 1945. In this project hundreds of soldiers are known to have experienced full-body exposures to mustard agent. Our research at Edgewood Arsenal uncovered dozens of documents relating to the testing, including test reports and biweekly progress reports. Only one document, however, contained any participants' names: six officers who had participated in one test. Navy officials reported similar problems in their research of the testing conducted at the University of Chicago. The testing may have exposed up to 60,000 sailors from the Great Lakes Naval Training Center.

VA officials said that without names of test participants they will need the services' assistance to obtain other forms of corroborating evidence, such as a link between a veteran's description of his test experience and military descriptions of testing programs. Our review indicated that no effort had been made to aggregate information available on the various tests, such as the dates and locations of tests, the types of exposures, the units involved, the names of individuals assigned to units during the involved time frames, and any indications of the people associated with the tests. Information of this type is contained in the records maintained by the military services at a number of locations. According to VA officials, they will need points of contact within the services to help them validate veterans' claims of test participation.

VA Asked the National Academy of Science to Address Other Eligibility Issues

Our review indicated that veterans who participated in tests in which mustard gas was applied to their forearms were generally not awarded VA benefits. According to VA officials, participants in arm tests are not usually awarded benefits because a search of medical literature did not disclose

any long-term chronic effects stemming from arm exposure. Additionally, several veterans in our review claimed health problems not recognized by VA as being associated with mustard gas exposure.

To ensure that all possibilities concerning long-term residual effects have been considered VA commissioned the National Academy of Sciences to review world medical and scientific literature to determine the long-term health effects of exposure to mustard agent and, if warranted, recommend policy changes for VA's consideration. This study, issued in January 1993, identified seven additional ailments associated with mustard agent exposure.⁶ Unlike the ailments previously recognized by VA, these ailments probably would not appear until many years after exposure. VA has already added these ailments to its listing of recognized mustard agent related illnesses.

Claims From Veterans Who Participated in Army Incapacitating Agent Tests Are Pending

Only recently has VA begun to track benefit claims specifically related to the Army's incapacitating agent tests. No completed claims that award or deny benefits specifically associated with such tests had been forwarded to VA headquarters by the conclusion of our review. However, we found five claims being processed. In reviewing these claims, we found that a system is in place for assisting these veterans to obtain information about their testing experiences. Additionally, both the Army and the National Academy of Science have conducted follow-up studies of these veterans.

Our discussions with claims adjudicators at each of the four VA regional offices we visited indicated that the adjudicators were knowledgeable of procedures for developing claims from participants in the Army's incapacitating agent experiments. VA has issued guidance on developing these claims, and the Army's Medical Research and Development Command has a system in place for assisting these veterans in pursuing claims with VA. Our review of the Army's responses to these veterans' inquiries also showed that the Army was providing these veterans with available data to help develop their claims.

The fact that so few claims were found from participants in the Army's incapacitating agent testing may be attributable to this group's having been extensively followed. In 1980, the Army followed up on 686 Army servicemen who were given LSD. This follow-up resulted in 220 men receiving medical physicals and an additional 100 returning completed

⁶These ailments include four respiratory cancers, skin cancer, chronic obstructive pulmonary disease, and acute nonlymphocytic leukemia.

medical health questionnaires. Again in 1980, the Army had the National Academy of Sciences follow up on incapacitating agent test veterans to study possible delayed and long-term effects of exposure to chemicals. In total, the Academy contacted 4,996 test veterans, and 4,085 of these responded to a questionnaire about their health. However, it is not clear how many incapacitating test veterans may have filed claims before the VA began to keep track of claims specifically associated with the incapacitating agent tests.

Information Gaps Limit VA Outreach Efforts

To date, VA has conducted only one outreach effort to contact veterans who participated in secret chemical and biological experiments. VA's 1991 initiative was hampered because the names of only a few of the test subjects were known. VA has yet to direct any outreach efforts toward the Army and Air Force veterans who participated in the Army's incapacitating agent experiments.

Despite concern within VA about the need for contacting test participants, the absence of names of test participants has precluded any significant effort on VA's part. In 1990, VA tried to contact participants in the Navy's testing program by checking the listing of last names against a directory of veterans receiving VA benefits. This effort resulted in VA contacting only 128 out of 2,900 veterans whose surnames are known.

Recommendations

We recommend that the Secretary of Defense direct the Secretaries of the Army and the Navy to aggregate and provide information to VA on their past mustard gas testing activities. The information should include the following:

- location of the tests,
- dates of the tests,
- units involved,
- types of exposures experienced, and
- names of participants to the extent they are available.

Additionally, we recommend that the Secretary of Defense direct the Secretaries of the Army and Navy to provide a point of contact for VA within each service to assist veterans in obtaining information about their test experiences.

Agency Comments

The Department of Defense provided comments on a draft of this report. The Department of Defense agreed with the report's findings and recommendations (see app. I). The Department of Veterans Affairs provided oral comments on a draft of this report. VA also agreed with our findings.

Scope and Methodology

We initially obtained information on the secret testing programs conducted by the services between 1942 and 1975 from senior health affairs officials within the Department of Defense. On the basis of these data, we interviewed officials and reviewed historical records at the Naval Research Laboratory, Washington, D.C., and the Chemical Research and Development Engineering Center, Edgewood, Maryland. This review identified no previously undisclosed programs. To further check, however, we also contacted the Disabled American Veterans. In its monthly publication, this organization featured two articles regarding secret military testing and the use of human guinea pigs and asked its 1.5 million members to contact it or us if they had information about secret military experiments. We received approximately 200 letters and telephone calls from veterans, and the Disabled American Veterans received a similar number. These data were compared against data provided by the Department of Defense to determine whether other programs might have existed. However, they did not disclose additional programs.

To review veterans' experiences in seeking VA benefits for disabilities they claim resulted from injuries sustained in mustard agent experiments during World War II, we reviewed all claims at VA's Central Office and four VA regional offices—Baltimore, Maryland; Huntington, West Virginia; Winston-Salem, North Carolina; and St. Petersburg, Florida. These offices were selected because they had processed a significant portion of mustard agent claims. Additionally, we interviewed numerous veterans who contacted us through our solicitation in the Disabled American Veterans magazine and veterans who contacted the Disabled American Veterans. We also interviewed officials at the VA Central Office and claims adjudicators at the four VA regional offices. In total, we reviewed 108 individual mustard agent claims on file at the four VA regional offices and 145 rating decisions sent to VA Headquarters.

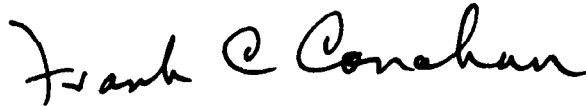
The claims from incapacitating agent test participants were obtained from veterans who contacted us about their test experiences and from inquiries made to the Army's Medical Research and Development Command.

Our work was conducted from November 1991 through September 1992 in accordance with generally accepted government auditing standards.

Unless you publicly announce this report's contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Secretaries of Defense, the Army, the Navy, and Veterans Affairs. We will also make copies available to others upon request.

This report was prepared under the direction of Henry L. Hinton, Jr., Director of Planning, who may be reached on (202) 275-6226 if you or your staff have any questions. Other major contributors are listed in appendix II.

Sincerely yours,



Frank C. Conahan
Assistant Comptroller General

Comments From the Department of Defense



DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING

WASHINGTON, DC 20301-3010

15 JAN 1993

Mr. Frank C. Conahan
Assistant Comptroller General
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Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "HUMAN EXPERIMENTATION: Information from DoD Can Help VA Assess Veterans' Disability Claims," dated November 13, 1992 (GAO Code 393487/OSD Case 9262).

The Department concurs with the GAO findings and recommendation. As discussed in the enclosure, the DoD will, to the extent feasible, make available to the Department of Veterans' Affairs information that may be useful in assessing disability claims of veterans.

Suggested technical corrections have been provided separately to the GAO staff. The Department appreciates the opportunity to comment on the draft report.

Sincerely,


Victor H. Reis

Enclosure

Appendix I
Comments From the Department of Defense

GAO DRAFT REPORT--DATED NOVEMBER 13, 1992
(GAO CODE 393487) OSD CASE 9262

"HUMAN EXPERIMENTATION: INFORMATION FROM DOD CAN HELP
VA ASSESS VETERANS' DISABILITY CLAIMS"

DEPARTMENT OF DEFENSE COMMENTS ON THE RECOMMENDATION

* * * * *

- **RECOMMENDATION:** The GAO recommended that the Secretary of Defense direct the Secretaries of the Army and Navy to aggregate and provide information to the Department of Veterans' Affairs on the World War II mustard gas testing activities. The GAO indicated that the information should include the following:

- location of tests;
- dates of the tests;
- units involved;
- types of exposures experienced by volunteers, and ;
- names of participants to the extent they are available. (p. 14/GAO Draft Report)

DOD RESPONSE: Concur. The Department agrees to provide the recommended information to the extent it is available in current documents. In addition, the Department will provide Service points of contact to assist the Department of Veterans' Affairs in determining the validity of disability claims associated with the tests. The additional DoD information will be made available and Service points of contact will be identified by the third quarter of FY 1993.

Enclosure

Now on p. 10.

Major Contributors to This Report

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