GAO

Report to the Ranking Minority Member, 'Committee on Veterans' Affairs U. S. Senate

January 1986

AGENT ORANGE

VA Needs to Further Improve Its Examination and Registry Program





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

Comptroller General of the United States B-208995

January 14, 1986

The Honorable Alan Cranston Ranking Minority Member Committee on Veterans' Affairs United States Senate

Dear Senator Cranston:

As requested in your January 26, 1983, letter, we reviewed the Veterans Administration (VA) agent orange examination program. The report discusses and evaluates how promptly VA gave veterans their examinations, whether VA was formally notifying veterans of the results of their examinations, and how reliable and complete the agent orange registry was.

As arranged with your office, unless you publicly release its contents earlier, we will make no further distribution of this report until 30 days from its issue date. At that time, copies will be sent to appropriate congressional committees; the Administrator of Veterans Affairs; the Director, Office of Management and Budget; and other interested parties.

Sincerely yours,

Charles A. Bowsher Comptroller General

Charles A. Bowsker

of the United States

Executive Summary

Since May 1978, the Veterans Administration (VA) has been examining Vietnam veterans who were concerned that they may have been exposed to agent orange, which some believe might be causing various health problems. VA reported that it had examined 199,409 veterans as of June 30, 1985.

Senator Cranston, the Ranking Minority Member of the Senate Committee on Veterans' Affairs, requested that GAO review the agent orange examination program to determine, among other things,

- how promptly VA gave veterans their examinations,
- whether VA was formally notifying veterans of the results of their examinations, and
- how reliable and complete the agent orange registry was, including why there was a wide discrepancy between the number of veterans VA reported it had examined and the number in the registry. (See p. 11.)

Background

VA began the agent orange examination program under its general authority to provide health care to veterans. As part of the program, VA medical centers and outpatient clinics perform physical examinations and certain laboratory tests. They report monthly the number of examinations they have given, answer veterans' questions concerning agent orange exposure, and make information relating to agent orange available to veterans.

VA has emphasized that prompt scheduling of the examinations should be a high priority and requires its facilities to send letters to the veterans explaining the results of the examination and laboratory tests.

In October 1982, GAO reported that VA needed to give veterans more timely examinations and more adequate information about their health. GAO also identified deficiencies in VA's computerized agent orange registry. VA established the registry in 1979 to identify veterans concerned about the possible health effects of exposure to agent orange, permit VA to contact veterans examined, help detect veterans' specific health problems, and describe the characteristics of veterans who have had agent orange examinations.

To accomplish its review objectives, GAO obtained national statistics on the agent orange program from VA's central office and visited 8 of VA's 160 medical centers. Because of the criteria used in selecting the medical centers to be visited, the results are not statistically representative of all VA medical centers. (See pp. 11 to 14.)

Results in Brief

Seven of the eight medical centers GAO visited were conducting agent orange examinations promptly or cited unusual circumstances that prevented them from doing so. (See ch. 2.) Although six of the eight centers visited were routinely sending letters to veterans after their examinations, only two sent letters explaining the examination and laboratory test results. At the other centers, letters did not discuss examination and test results primarily because officials discussed these personally with most veterans. (See ch. 3.)

VA has improved the agent orange computerized registry since GAO reported on it in October 1982. Despite these improvements, problems still inhibit its reliability. Data on the health problems cited by veterans were not as specific or consistent as they could have been. Moreover, thousands of examinations reported by medical facilities had not been entered in the registry primarily because (1) some forms used to code examination results were never submitted for inclusion in the registry, (2) a programming error deleted 2 months' records, and (3) delays occurred between the time medical centers reported examinations given and the time data from those examinations were entered in the registry. (See ch. 4.)

Principal Findings

Examinations Were Prompt

Although VA has not told its facilities in writing how promptly examinations should be given, it expects facilities to give them within 30 days after they are requested. GAO found that veterans scheduled for appointments in June, July, or August 1984 had to wait an average of no more than 30 days at five of the eight medical centers visited.

Officials at two of the three centers not giving examinations within 30 days attributed the delays, at least partially, to the demand resulting from publicity regarding settlement of an agent orange-related lawsuit. Both centers were trying to accommodate the increased demand for examinations. Officials at the third center also said the lawsuit settlement affected their timeliness, but added that even when demand is not

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high, a veteran has to wait 4 to 6 weeks for an examination because of that center's workload. (See ch. 2.)

Some Veterans Not Informed of Results

Although medical center officials told GAO they discussed examination results personally with most veterans, some veterans who had serious health problems were not informed of the problems through letters that VA requires its medical centers to send. Six of the eight centers GAO visited were sending letters to veterans after their examinations most or all of the time. A seventh center sent letters only to veterans who did not return to discuss their laboratory test results with the physician. Letters from only two of the seven centers that sent letters explained both examination and laboratory test results. (See ch. 3.)

The Computerized Registry Was Not Reliable

According to the agent orange program director, to describe the characteristics of veterans who have received examinations, VA needs to know what veterans' complaints (symptoms) are. The forms used to obtain this information, however, restrict the number of codes that can be used to identify complaints. Because of this restriction, many complaints must be coded with a general code which does not identify veterans' specific complaints. As a result, VA has no way to determine from the registry more than 40 percent of veterans' complaints and cannot use the data as desired. At the medical centers GAO visited, the clerks who code complaints could provide more specific and consistent information if they could use more codes.

According to VA's program guidance, records of all veterans who had agent orange examinations since October 1, 1978, should have been entered in the computerized registry. However, as of June 1985 about 47,600 of the over 199,400 examinations reported by medical facilities had not been entered. At the medical centers GAO visited, 22 percent of the examinations sampled were not in the registry. The thousands of examination records not in the registry limit its usefulness in describing the characteristics of agent orange examinees, showing their specific health problems, and contacting veterans who received an examination. (See ch. 4.)

Recommendations

GAO is making several recommendations that the Administrator, through the Chief Medical Director, improve VA's management and oversight of the agent orange examination program. (See pp. 19, 27, 41, and 55.)

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Agency Comments

VA agreed with most of GAO's recommendations. VA stated that it would continue to emphasize the importance of the agent orange examination and registry program with conference calls, newsletters, and personal letters and by updating policy docments, but did not agree with GAO's specific recommendations on how to emphasize these. GAO still believes requiring more specific VA policy guidance in such areas would improve program implementation.

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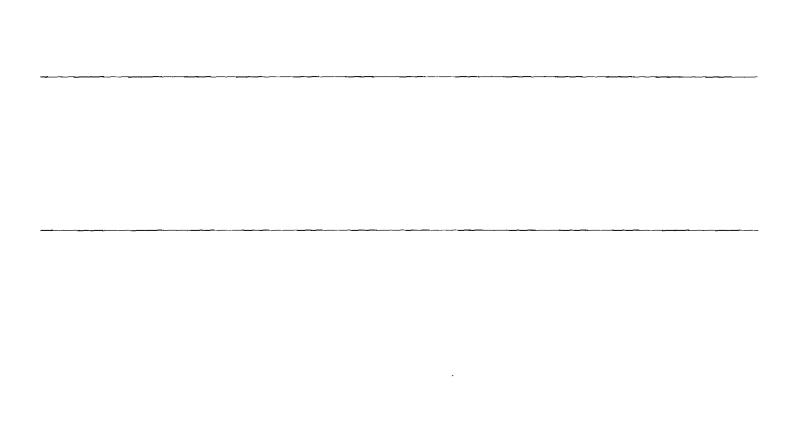
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Abbreviations

GAO	General Accounting Office
ICD-9-CM	International Classification of Diseases, 9th Revision,
	Clinical Modification
VA	Veterans Administration



Introduction

Since May 1978, the Veterans Administration's (vA's) Department of Medicine and Surgery has been examining Vietnam veterans who were concerned that they may have been exposed to agent orange,¹ which some believe might be causing a variety of health problems. VA started the program under its general authority to provide health care to veterans. In 1981, the Congress passed the Veterans' Health Care, Training, and Small Business Loan Act (Public Law 97-72, Nov. 3, 1981), which in section 102 authorized VA to provide priority medical care to veterans who may have been exposed to agent orange.

VA's Agent Orange Projects Office has been responsible for managing the examination program, which consists of giving Vietnam veterans a complete physical examination, including certain laboratory studies; documenting a complete medical history; answering veterans' questions concerning agent orange exposure; and making information about agent orange available to such veterans and the public. VA medical centers and outpatient clinics perform the examinations. Physicians (known as environmental physicians), who are responsible for the program at VA facilities, or other designated physicians are required to discuss with each veteran examined the results of the examination and laboratory studies. VA reported that 199,409 veterans had been given agent orange examinations as of June 30, 1985.

This is our second report on the agent orange examination program. In October 1982, we reported problems with VA's effectiveness in assisting Vietnam veterans concerned about agent orange and identified the need for VA to give veterans more prompt and thorough examinations and more adequate information about agent orange and their health. We also identified problems with VA's agent orange computerized registry. (See ch. 4.)

Objectives, Scope, and Methodology

Senator Cranston, the Ranking Minority Member of the Senate Committee on Veterans' Affairs, requested that we review the agent orange examination program. In later discussions with his office, we agreed to determine

¹Agent orange, a mixture of the compounds 2,4-D and 2,4,5-T, was the most widely used herbicide in Vietnam. It contains small amounts of a contaminant, TCDD (2,3,7,8-tetrachlorodibenzo-para-dioxin), which is a very toxic chemical.

²VA's Agent Orange Examination Program: Actions Needed To More Effectively Address Veterans' Health Concerns (GAO/HRD-83-6, Oct. 25, 1982).

- · how promptly va gave veterans examinations,
- whether va formally notified veterans of the results of their examinations.
- how reliable and complete the information in VA's agent orange registry was.
- why there was a wide discrepancy between the number of veterans VA facilities report they have examined and the number in the registry, and
- to what extent VA facilities were submitting tissue samples to the Armed Forces Institute of Pathology tissue registry.

In addition, we agreed to assess how VA interpreted section 102 of Public Law 97-72. We also agreed to assess VA's system for reporting the number of veterans to whom it has provided care under the law.

To accomplish these objectives, we visited 8 of VA's 160 medical centers.³ Generally we used the following criteria to select the centers to visit:

- 1. The medical center was 1 of the 42 facilities that reported it had conducted at least 900 agent orange examinations as of October 1983. This helped to assure that we would visit facilities that had provided a large number of examinations.
- 2. The number of examinations in the computerized registry for the medical center was at least 20 percent less than the number of examinations that the center reported it had given as of October 1983. This guideline was intended to direct us to facilities having many veterans not listed in the registry and might have increased the likelihood of identifying reasons for the discrepancy.
- 3. The medical center's statistics from May to October 1983 generally indicated it had a backlog of fewer than 50 examinations, yet an average waiting period of at least 6 weeks. We assumed that this combination of statistics indicated that the medical center was having problems giving veterans prompt examinations.

Seven of the 160 va medical centers met the aforementioned criteria. We chose to visit six of them—Ann Arbor, Michigan; Indianapolis, Indiana;

³Most of VA's health care facilities are organized into 160 medical centers. A medical center may consist of one or more hospitals, one or more outpatient clinics, a nursing home, and a domiciliary. Only eight outpatient clinics and one domiciliary are independent of any medical center.

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Fargo, North Dakota; Miami, Florida; Palo Alto, California; and Philadelphia, Pennsylvania. We did not visit the other center that met the criteria—Sioux Falls, South Dakota—because of its proximity to Fargo. In addition, because during our preliminary audit work we had visited two medical centers located near Washington, D.C., we returned to those centers to complete our audit objectives. These two centers were Washington, D.C., and Richmond, Virginia. Washington, D.C., met the first two criteria listed above, but not the third. Richmond met the last two criteria, but it reported giving only 309 examinations as of October 1983. Because of the criteria used in selecting the medical centers to be visited, the results are not statistically representative of all VA medical centers.

Our visits to the eight medical centers were made in June, July, and August 1984. We initially visited the Washington, D.C., medical center in January and February 1984 and the Richmond medical center in March 1984.

Specifically, we

- reviewed records at the VA central office pertaining to the number of veterans reported as having had an examination;
- interviewed officials from the central office and the medical centers we visited, the Department of Health and Human Services' National Center for Health Statistics, and the Armed Forces Institute of Pathology;
- compared a random sample of veterans' names contained on agent orange locator cards at the medical centers visited to names in the computerized registry and estimated the number of veterans with verified examinations not in the registry;
- reviewed, at the medical centers visited, the records of a sample of veterans who had agent orange examinations to determine the content and timeliness of letters notifying them of their examination results;
- reviewed, at the medical centers visited, appointment books or other documentation to determine the centers' promptness in giving veterans their examinations;
- assessed how specifically and consistently the eight medical centers' staff coded selected health complaints and diagnoses for entry into the registry; and
- spoke with officials at the eight medical centers we visited and telephoned officials at seven other medical centers that we believed would likely have heavy workloads to determine how they interpreted section 102 of Public Law 97-72.

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To determine whether medical centers sent letters to veterans after their agent orange examinations and to assess the content and timeliness of those letters, we reviewed files of veterans who had examinations between January 1 and April 15, 1984. We used April 15, 1984, as the cut-off date to allow medical centers time to write the letters before our site visits. We selected the files to review using either the centers' locator cards or other records of examinations given.

We requested for review a random sample of 20 files or 100 percent of the files of veterans who had examinations between the above dates, whichever was fewer. If medical center officials could not locate a requested file, we did not substitute a second file. If the examination date, according to the medical record, differed from the date indicated on the locator card or other source used and was outside our specified time period, we did not include the file in our analysis and did not substitute a second file. Also, if the medical record did not indicate that an examination had been given, we did not include the file in our analysis and did not substitute a second file. We did this because of time limitations on the duration of our visits to facilities and because we were not attempting to project the results to all letters sent by these medical centers.

Because the letters examined were not selected as a representative sample of all letters, the results are not statistically projectable. However, we believe we reviewed enough letters to understand their timeliness and content at the eight medical centers. The number of files we reviewed at each medical center is shown in table 1.1.

Table 1.1:Number of Files Reviewed to Determine Whether Timely and Complete Letters Were Sent

Medical center	Number of files reviewed
Ann Arbor	18
Fargo	15
Indianapolis	14
Miami	14
Palo Alto	8
Philadelphia	17
Richmond	16
Washington	14

Appendix I describes our sampling procedures for selecting veterans' names from facilities' agent orange locator cards and estimating the

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number of names not in the registry. The results of our review, as they relate to the locator cards sampled, are projectable to all locator cards containing names of veterans examined between 1978 and 1983 at the eight medical centers, but are not projectable to all VA medical centers. Appendix I also describes how we assessed the specificity and consistency with which medical center staff coded complaints and diagnoses.

Our review was conducted in accordance with generally accepted government auditing standards.

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VA expects its medical centers to give veterans agent orange examinations within 30 days after they are requested. Most centers we visited were giving timely examinations or cited unusual circumstances that prevented them from doing so. However, the Agent Orange Projects Office did not require medical centers to report information on timeliness. Consequently, VA was not monitoring some centers that had timeliness problems and was monitoring other centers that did not.

Most Medical Centers Visited Were Giving Prompt Examinations

VA has emphasized to its facilities that prompt handling and scheduling of agent orange examinations should be a high priority. VA has not specified in writing how promptly examinations should be given, but its program guidance states that the Agent Orange Projects Office staff will contact facilities having 50 or more examinations pending at the end of a month to determine how many were pending beyond 30 days. In addition, the registry coordinator told facilities in November 1982 that they should try to reduce the number of examinations that were pending for more than 30 days. Projects Office officials also told us veterans should not have to wait longer than 30 days from the time they request an examination until they receive one.

At each medical center visited, we attempted to determine how long veterans scheduled for appointments in June 1984 had to wait for those appointments. Based on our analyses and discussions with medical center staff, we found that most centers were giving examinations within 30 days or had unusual circumstances that prevented them from doing so. We were able to evaluate timeliness in June 1984 at five centers—three (Ann Arbor, Indianapolis, and Philadelphia) had average waiting periods of less than 30 days, but two (Palo Alto and Richmond) had waiting periods of 48 and 65 days, respectively. We were unable to determine the average wait for a June 1984 appointment for the other three centers visited because they did not document the dates the appointments were made. However, an official at Fargo told us that the wait was about 50 days as of July 1984, Miami officials advised us that the wait was 2 to 3 weeks in June 1984, and available records at the Washington Medical Center showed that as of August 1984, the wait was no more than 30 days.

Officials at six medical centers we visited said the demand for agent orange examinations had increased substantially just before our visits because of national publicity regarding settlement of an agent orangerelated lawsuit. Officials in both Fargo and Richmond attributed delays in giving examinations to this increased demand. A Richmond official

also attributed its increase to the hospital's move to a new facility. The official said that following the move, overall outpatient workload increased 42 percent. Officials at both medical centers said veterans normally can get an appointment for an agent orange examination within 30 days.

To accommodate the increased demand, both Fargo and Richmond increased the number of physicians giving agent orange examinations and the number of scheduled examinations. According to a Fargo official, that medical center would soon be able to schedule examinations within 2 weeks after they were requested. However, in March 1985 an official told us that, because of continued publicity about agent orange, the demand for examinations remained high. He said the center gave 20 examinations a week and, beginning the following week, planned to increase the number to 24 a week. In Richmond, the backlog had been eliminated by the time of our visit in July 1984. At that time, no veteran was scheduled for an appointment beyond August 1984, except one who had requested a later appointment.

Palo Alto officials also said that the increased demand due to the lawsuit settlement affected the time they take to provide an agent orange examination. We identified 14 veterans who requested examinations in June 1984. They had to wait an average of 99 days for their appointment. We were told that any veteran who called in for an appointment at the time of our visit in July 1984 could not be examined until November. At that time, Palo Alto was giving an average of 18 agent orange examinations a month. The center could not give additional examinations, we were told, because of its workload. The acting chief of Medical Administration Service, the chief of Ambulatory Care, the supervisor of Ambulatory Care and Processing, and the supervisor of the registered nurse practitioners at Palo Alto also noted that the agent orange examination program was a low priority, that exposure occurred years ago, and that most veterans requesting examinations were healthy. They said that even when demand is not high, a veteran will have to wait 4 to 6 weeks for an examination.

In her trip reports of visits to seven medical centers and an outpatient clinic in the summer of 1984, the registry coordinator noted that four facilities were scheduling examinations within 30 days after they were requested. Two facilities, including Palo Alto, were taking at least 2 months to give an examination. The trip reports for the other two locations did not indicate how prompt examinations were.

VA Was Not Getting the Information It Needs to Monitor Timeliness

VA directs its medical facilities to submit statistics each month on the number of examinations performed and the number pending. VA defines a pending examination as one for which an appointment has been scheduled beyond the end of the month. Facilities are not directed to report how long veterans have to wait for those appointments. However, VA urges them to make every effort not to have 50 or more examinations pending. The Agent Orange Projects Office director and registry coordinator noted that the number 50 was arbitrarily established, although it seemed reasonable based on workload data. The registry coordinator contacted every facility that reported having 50 or more examinations pending to determine what action was planned to reduce the backlog and, in many cases, how many examinations were pending beyond 30 days.

Agent Orange Projects Office officials acknowledged that facilities with more than 50 examinations pending may not have had a timeliness problem, and conversely, facilities with fewer than 50 pending may have a problem if those examinations were pending more than 30 days. Statistics at three medical centers we visited demonstrate this. Palo Alto reported 47 examinations pending at the end of July 1984, the month of our visit, but as noted earlier, veterans making an appointment in July had to wait about 4 months for their examinations. Conversely, Richmond and Washington reported as pending 197 and 57 examinations, respectively, at the end of the month of our visits, but veterans making appointments at that time had to wait only 25 and 30 days, respectively, for their examinations.

Based on the statistics reported to the Agent Orange Projects Office, the registry coordinator made monitoring phone calls to Richmond and Washington—centers that had no timeliness problems—but did not contact Palo Alto—a center that had such a problem. With information on how long examinations were pending, the coordinator could have better directed her monitoring efforts.

The Projects Office director agreed that a facility's timeliness in giving examinations is more important than the number of examinations pending. Other Office officials noted, however, that they have limited ability to enforce timeliness because they lack authority to set priorities for VA facilities. The registry coordinator sends her monthly report to the VA regional directors. The regional directors' responsibilities include evaluating the operating effectiveness indicators of field facilities and taking corrective action.

Conclusions

VA has given the prompt handling and scheduling of agent orange examinations a high priority. Most of the medical centers we visited were giving prompt examinations or cited unusual circumstances that prevented them from doing so. Two of the three medical centers with long waiting periods had taken appropriate action to reduce the waiting period.

va's criterion for monitoring the timeliness of scheduling agent orange examinations sometimes identifies centers—such as Richmond and Washington—that have no timeliness problem and not centers—such as Palo Alto—that have a problem. va should specify how promptly examinations should be given and require medical centers to report the number of pending appointments not meeting that criterion.

Recommendations to the Administrator of Veterans Affairs

We recommend that the Administrator, through the Chief Medical Director.

- specify in VA program guidance that, to the extent practical, facilities give veterans agent orange examinations within 30 days of the request date and
- require facilities to report the number of examinations pending for more than 30 days at the end of each month.

Agency Comments and Our Evaluation

In a November 27, 1985, letter commenting on a draft of this report, the Administrator of Veterans Affairs said that the Agent Orange Projects Office has made repeated references in conference calls to medical facilities and in personal calls to individual delinquent facilities to a "30-day period" as a maximum desirable wait before examination. However, vA did not agree it should place a 30-day limit on scheduling agent orange examinations because such a limit may be impossible to enforce. While we recognize that the number of requests for agent orange examinations may vary, making compliance with a time limit occasionally difficult, we believe a time-frame goal should be formally incorporated into program guidance. With a written goal, vA facilities should clearly understand what vA management expects of them.

VA also noted that its medical centers and clinics use centralized scheduling units to make appointments for agent orange examinations as well as all other clinic appointments. VA said that its current system for reporting the number of pending scheduled examinations identifies most delinquent facilities. VA also said that VA facilities cannot report the

number of examinations pending for more than 30 days without requiring that the entire scheduling system be revised to make such notation routine just for agent orange examinations.

Our review showed that VA's current system for reporting the number of pending scheduled examinations does not identify all facilities that have a timeliness problem and that reporting how long examinations are pending provides VA better information than tracking the number of examinations pending. We believe VA medical facilities would not have difficulty noting the dates veterans request their agent orange examinations. Five of the eight medical centers we visited were already documenting this information, primarily in their separately maintained agent orange scheduling books. A sixth center had scheduling procedures that included documenting this information, but had not followed those procedures. Medical facilities should be able to document agent orange examination request dates either on the index cards they are required to prepare for every veteran who requests an examination, or in separately maintained agent orange scheduling books. Recording the examination request date should not be time consuming since, during the 3-month period from June 30 to September 30, 1985, VA medical facilities were providing a monthly average of only 8.2 agent orange examinations.

va directives require its physicians to personally advise veterans of the results of their physical examinations and requires its medical centers to send letters within 2 weeks to the veterans explaining the results of the examinations and associated laboratory tests. Most centers we visited were sending letters to veterans after their agent orange examinations, but most letters did not explain the results of the physical examinations and laboratory tests. Although medical center officials told us they discussed examination results personally with most veterans, some veterans who had serious health problems were not informed of the problems through these letters. Moreover, va sent letters to about 44 percent of the veterans in our sample more than 30 days after their examination. As a result, va cannot be assured that all veterans are informed, or informed promptly, about the results of their physical examination and laboratory tests.

Most Medical Centers Visited Were Sending Follow-Up Letters to Veterans

An October 1980 VA survey of veterans' satisfaction with the agent orange examination process found that in about 56 percent of the cases, a VA physician did not discuss the results of the physical examination with the veteran, and in about 80 percent of the cases, vA did not give the veteran laboratory test results. As a result of these findings, a VA directive required that (1) physicians personally advise each veteran examined of the results of the physical examination and (2) medical centers send a follow-up letter to each veteran explaining the results of the examination and associated laboratory tests. The Agent Orange Projects Office director told us the letters should contain all important examination, laboratory test, and medical history findings, whether they are related to agent orange or not. He said that if the veteran had no significant health problems, the letter could be brief, simply stating that the veteran appeared to be in good health. An official in VA's Medical Administration Service told us that VA does not require its medical centers to send follow-up letters after giving other types of examinations, such as those given for determining eligibility for compensation and pension benefits. However, according to the Projects Office director, communicating laboratory test results in the letter is important if those results are not available when the physician has the personal interview with the veteran.

At the medical centers we visited, we selected a sample of 116 files of veterans who had agent orange examinations between January 1 and April 15, 1984. Our sample selection methodology is described on page 13. Our review of these files indicated that six of the eight medical centers were sending letters most or all of the time. A seventh medical

center, Ann Arbor, sent letters only to veterans who did not return to discuss their laboratory test results with the physician. The eighth center, Palo Alto, did not send letters to examined veterans. In addition, a Miami Medical Center official told us one of its outpatient clinics had not sent letters to examined veterans until July 1984, the month of our visit.

The Ann Arbor and Palo Alto Medical Centers and the Miami outpatient clinic did not send letters because, according to VA officials, examining physicians and nurses personally advised veterans of their examination and laboratory test results. At Ann Arbor, the environmental physician said he encouraged veterans at the time of their examination to return for a half-hour appointment for such a discussion. He said he believed most veterans do return. According to a Palo Alto official, sending out letters was a low priority because of a personnel shortage.

The Projects Office registry coordinator found during her visits to seven medical centers and one outpatient clinic in the summer of 1984 that three locations, including Palo Alto, were not sending letters to veterans.

Letters to Many Veterans Did Not Explain Examination Results

Although seven of the medical centers we visited were sending letters to examined veterans, our review of files indicated that only two, Washington and Indianapolis, sent letters that explained the examination and laboratory test results. Washington began sending such personalized letters after our initial visit. Although Fargo was sending veterans letters that discussed abnormal results of its physical examinations, none of the letters we reviewed discussed abnormal laboratory results. However, we did not determine whether the veterans in our sample had laboratory tests with abnormal results. Philadelphia sent veterans letters that listed abnormal laboratory results, but not abnormal physical examination results.

We believe that some veterans were not likely to understand the laboratory results discussed in letters written by the Philadelphia Medical Center. For example, the only reference to the laboratory results in one letter was:

"A review of the results of your examination indicates that

SGPT 75 (0-29) SGOT 97 (0-25)

In view of the above findings, we suggest that you contact the Environmental Physician . . . "

The environmental physician explained that the above represented laboratory test results. "SGPT 75," for example, referred to an elevated enzyme level of 75. The physician said he included laboratory test results in the letters so that, if the veteran called in with a question or wanted to consult another physician, the results would be readily available. The physician said he did not have time to completely discuss abnormalities in the letter. He knew of no requirements regarding the letters' contents.

According to the files we reviewed, three medical centers sent veterans standardized letters that did not discuss abnormal results of the physical examination or the laboratory tests. Richmond, for example, sent every veteran in our sample the same letter, regardless of the examination results. Each letter stated, "A review of the results of your examination indicates: No residuals of Agent Orange exposure on this examination." In Ann Arbor, veterans who had an agent orange examination and did not meet with the physician to discuss laboratory test results received a standardized letter even if the test results were abnormal. The letter to a veteran who had abnormal test results listed the tests that were given and stated, "My review of these lab tests indicate[s] that further testing should be done." The letter did not explain what the problem was or mention the physical examination findings. In Miami, veterans who had a diagnostic test with abnormal results received a letter that stated, "The results of this evaluation have been reviewed by our professional staff and some abnormalities have been found in your diagnostic tests." The letter did not explain what the abnormalities were or mention the physical examination findings.

According to medical center officials at the above three facilities, their letters did not discuss examination and test results primarily because they discussed these findings personally with most veterans. According to officials in Miami, veterans learned of the results during face-to-face and telephone discussions with the examining nurses and, after receiving the standardized letter, could call the environmental physician or come in for more information. The environmental physician in Ann Arbor said he did not have time to individualize letters and, in any case, most veterans who received a standardized letter indicating abnormalities called or came back. Officials in Richmond said they interpreted VA's requirement to discuss abnormal findings in letters as applying only to

findings related to agent orange exposure. One official said the physician discussed all findings, regardless of their causes, personally with the veteran, but the letters discussed only those the physician believed were related to agent orange exposure. She also said that letters did not discuss abnormal findings that were not related to exposure because such a discussion might imply a relationship and would therefore raise questions regarding the veteran's eligibility for treatment.

The Agent Orange Projects Office director said that if a letter sent to a veteran did not explain the examination or laboratory test results, but the veteran was under continuing care at the VA facility, the veteran likely would have known of the examination findings. If, however, the veteran's only visit to the VA facility was for an agent orange examination, the veteran was not likely aware of the findings. In the latter case, the director said he would be concerned if the facility's letter to the veteran did not discuss the examination results.

The Projects Office registry coordinator found that of the five facilities she visited during the summer of 1984 that were sending veterans letters, four were sending personalized letters.

Some veterans who received a standardized letter, a letter that noted laboratory results only, or no letter at all had serious problems identified during their agent orange examinations. For example, in our sample of files reviewed at Philadelphia, Ann Arbor, Richmond, and Miami, we found veterans with diagnoses of alcoholism, post-traumatic stress disorder, diabetes mellitis, osteoarthritis (a chronic degenerative joint disease), heroin addiction, obstructed coronary arteries, scoliosis (deviation of the backbone), schizophrenia, and manic depression. None of these veterans received a letter discussing these findings. Although medical center physicians or nurses may have personally advised the veterans of their problems, VA cannot be assured that veterans are informed unless personalized letters are sent.

Letters Need to Be Sent to Veterans More Promptly

In November 1983, the Agent Orange Projects Office director requested that follow-up letters be sent to veterans within 1 month after their examination. The sample files we reviewed of veterans who had examinations between January 1 and April 15, 1984, indicated that four of the seven medical centers that sent letters did not send half or more of their letters until after 30 days from the date of veterans' examinations. Overall, about 44 percent of the letters in our sample were dated at least 31 days after the veterans' examinations. As shown in table 3.1, this is

based on all files in our sample that contained dated letters and did not indicate that specialty consultations were given.

Table 3.1: Days From Date of Examination to Date of Letter

		Number of days					
Medical center	Number of sample files	0-14	15-30	31-60	61-90	Over 90	
Ann Arbor	6	0	1	0	2	3	
Fargo	12	8	2	2	0	0	
Indianapolis	5	0	1	3	1	0	
Miami	4	2	0	1	0	1	
Palo Alto ^a	•	•	•	•	•		
Philadelphia	14	6	8	0	0	C	
Richmond	12	0	0	6	3	3	
Washington	4	0	4	0	0	C	

^aNo letters in sample files.

In June 1984, after the period covered by our sample, VA revised its program guidance to require medical facilities to mail letters within 2 weeks of the examination appointment, except when the physician requested a consultation at a specialty clinic as part of the examination process. For these exceptions, VA did not indicate when the letter should be sent. Trip reports on three of the five locations the Projects Office registry coordinator visited that were sending letters mentioned that the letters were being sent within 2 weeks.

Conclusions

Most medical centers we visited were sending letters to veterans after their agent orange examinations, although many veterans had to wait more than 30 days before receiving their letter. Although we found that many letters were standardized, lacking an explanation of the results of the examination and laboratory tests, the Projects Office registry coordinator found that of the five facilities she visited during the summer of 1984 that were sending veterans letters, four were sending individualized letters. The discrepancy between these two findings may be due to the limited sample of medical centers we each visited.

We did not assess the need for medical centers to send a letter to each veteran examined. However, since VA requires its medical centers to send letters that discuss examination and laboratory test results to assure that veterans are informed of the results, it should monitor medical centers' compliance with the requirement.

Recommendation to the Administrator of Veterans Affairs

We recommend that the Administrator, through the Chief Medical Director, increase the monitoring of medical center compliance with the requirement to send complete and timely letters to veterans informing them of the results of their agent orange examinations, including laboratory tests, by such means as increasing the number of field visits made by central office staff.

Agency Comments and Our Evaluation

In his November 27 letter, the Administrator stated that timely and complete reporting of agent orange examination results is important and concurred with our recommendation that monitoring of medical center compliance with the requirement to send letters to veterans should be increased. VA said, however, that the current size of the Agent Orange Projects Office staff and travel budget restricts expanding the number of field visits. Moreover, VA noted that a tracking system for delinquent letters would not be cost effective, considering the work with which it would interfere. VA plans to emphasize the importance of timely letter notification during its future bimonthly conference calls to VA facilities.

The Projects Office registry coordinator told us she made six site visits to vA facilities in October 1984, but between October 1984 and November 1985, no one from that office had made additional visits. However, if the size of the staff and travel budget do not permit increasing the number of site visits, we believe vA can monitor compliance in an alternative way (in addition to the bimonthly conference calls) by asking medical centers periodically to submit their previous month's letters with the examination dates annotated. This should involve minimum interference with VA staffs' other work.

va has compiled in a computerized registry, maintained by its Austin, Texas, data processing center, selected information about veterans who have had agent orange examinations. va has made notable improvements in the registry since we issued our October 1982 report on this program, but can further improve the consistency and specificity of data on the health problems cited by veterans. Va can further ensure that accurate information is being submitted to the registry on all veterans. These improvements would increase the registry's usefulness for describing the characteristics of the participants and determining their specific health problems.

As of June 1985, the number of examination records in the computerized agent orange registry was 24 percent less than the number of examinations VA medical facilities reported they had given. About 47,600 of 199,400 examinations reported by the medical facilities had not been entered in the registry. This discrepancy existed primarily because (1) some codesheets used for entering examination data in the registry were not submitted to the data processing center for inclusion, (2) other data were not entered into the registry, and (3) delays occurred between when medical centers reported examinations given and when data from those examinations were entered in the registry. The thousands of examination records not in the registry make it of limited use in describing characteristics of all examinees, showing their specific health problems, and if necessary, contacting veterans who received an examination.

VA officials have stressed that because participation in the program is voluntary, the registry cannot be viewed as being representative of Vietnam veterans as a whole and cannot be used as an epidemiological tool or to make statistically valid comparisons with other groups. According to VA, the registry's purposes are to

- identify veterans concerned about the possible health effects of exposure to agent orange in Vietnam,
- permit VA to contact veterans to provide further information or for further testing,
- provide a means of detecting veterans' specific health problems in the event unusual health trends show up in the veterans, and
- describe the characteristics of veterans in the registry.

Although VA was unable to estimate the cost of maintaining the registry, according to statistics provided by a VA official, nearly 4,900 hours were spent by central office and data processing center staff on the agent

orange program in fiscal year 1984. This excludes time spent on keypunch operations and time spent by the medical centers in examining veterans and preparing input for the registry. Salary levels associated with the 4,900 staff hours were not available from VA.

Most Early Problems With the Registry Have Been Corrected

va has corrected most of the agent orange registry's problems that we identified in our October 1982 report. We pointed out that the registry contained inaccurate and unreliable data, was unable to detect duplicate entries, lacked adequate information on veterans' health problems, and did not include address information. We concluded that the registry was of little use in determining participants' health problems and in locating veterans. For these reasons, and because va had made little use of the registry, we recommended that it be discontinued. Va officials disagreed, claiming the registry was the most extensive list of veterans who have had examinations, was an important mechanism for detecting significant health trends, and enabled va to determine areas requiring more indepth medical or scientific analysis.

Rather than discontinue the registry, VA corrected some problems with the existing data and revised the forms used to collect information to prevent further inaccuracies and omissions. The forms were not revised, however, until after nearly 86,000 veterans' names were in the registry. The inaccuracies and omissions associated with many of these participants remain. To correct some of the inaccuracies, such as the number of exposures and types of contact with agent orange, veterans would have to be reinterviewed. According to VA officials, adding some useful data, such as specific diagnoses, would be too costly. Also, because the forms were redesigned, most medical data on the 86,000 veterans are not compatible with data on veterans entered into the registry since the revision.

According to VA officials, before we issued our October 1982 report, VA programmed the computer to eliminate all exact duplicate records in the registry. VA staff also tried to eliminate manually all similar records in the registry that appeared to be duplicates. For example, records identical except for one or two digits of the social security number were examined as possible duplicates. In addition, VA programmed the computer to prevent future entry of records with the same social security number as one already in the registry. All duplicate records now are recorded as follow-up examinations. In the portion of the registry for the eight medical centers we visited, we identified similar records that

VA staff may have overlooked as duplicates in only 25 of 7,445 entries (0.3 percent).

Our October 1982 report documented that the registry lacked specific diagnoses of veterans' health problems. For example, as of December 1981, the registry showed that 19 percent of the veterans examined had skin diseases, but it did not specify whether the skin problems were chloracne (a condition known to result from dioxin exposure), common dermatitis, or a fungal infection, such as athlete's foot. The revised codesheet instructs examining physicians to list their diagnoses. Medical center coders then use an extensive, specific classification system to code these diagnoses.

A final problem with the registry, as we reported in October 1982, was that the original codesheet did not request address information. VA has not only revised the codesheet to obtain addresses, but also attempted to obtain current addresses of veterans already in the registry. However, it still lacks much of this information. The Agent Orange Projects Office registry coordinator estimated that about 93,000 veterans should have been sent an address update and health questionnaire. As of December 1983, 32,240 forms were returned completed, and 14,550 were returned undeliverable. We were informed in November 1985 that no additional responses had been received.

As of June 1984 the portion of the registry relating to the medical centers we visited had no addresses for 25 percent of the veterans in the registry. Table 4.1 indicates, for each medical center visited, the percentage of veterans' addresses missing from the registry.

Table 4.1: Percent of Veterans' Addresses Missing From Registry

Medical center	Percent
Ann Arbor	21
Fargo	18
Indianapolis	33
Miami	22
Palo Alto	16
Philadelphia	28
Richmond	1
Washington	36

According to VA, another 10 percent of the names in the registry had addresses to which the Postal Service could not deliver mail.

VA has continued to make little use of the registry. In August 1983 the Projects Office director presented data from the registry to the American Chemical Society. The data were on participants in the registry as of May 1983. The data were not qualified to indicate that many veterans who had agent orange examinations were not in the registry. We were informed that since that time, VA has examined information in the registry and used it as a mailing list.

More Specific and Consistent Information About Veterans' Complaints Could Be Coded

To help achieve the registry's purpose of describing participants' characteristics, va needs to know what veterans' complaints, or symptoms, are.¹ According to the Projects Office director, registry participants' complaints are important to document so that va will know what problems these veterans perceive they are having, whether veterans are presenting many vague symptoms for which no diagnoses exist, and how many veterans are requesting examinations just out of concern, and not because they have problems. The revised codesheet, however, restricts the number of possible codes that can be used to identify the complaints. As a result, va has no way to determine from the registry over one-third of veterans' complaints and cannot use the data as desired.

VA Restricts the Number of Complaint Codes That Coders May Use

As part of the agent orange examination, veterans are asked what their complaints are. Administrative personnel, called coders, then refer to an extensive, five-digit diagnostic classification system, the <u>International Classification of Diseases</u>, 9th Revision, <u>Clinical Modification</u> (ICD-9-CM), to code the complaints. VA chose to use the ICD-9-CM diagnostic system because medical facility coders were already familiar with this system. According to the registry coordinator, the agent orange program is the only VA program that requires coders to code complaints.

The codesheet, however, restricts coders to using only one section of the ICD-9-CM system. That section, "Symptoms," comprises only 17 pages of the 1,053-page classification system book. All codes in this section begin with the digits "78." These two digits are preprinted on the agent orange registry codesheet, and coders are instructed to use only "78" codes when coding complaints. They are further instructed to use 78999 to code complaints that cannot otherwise be coded. The 78999 code is

¹Complaints and symptoms are similar terms for conditions presented by a patient to a physician, such as "chest pain." They may not be medically valid because they have not been clinically determined. A diagnosis is the determination of a disease, such as "myocardial infarction."

not part of the ICD-9-CM system but is a VA-designated code. As of September 1985, nearly 41 percent of the 114,626 complaints in the registry were coded 78999. This is up from 33 percent, as of June 25, 1983, the first time information based on the revised codesheet was summarized.

The registry coordinator said that complaints should be coded from only the "78" section because that section lists symptoms while the rest of the classification system lists diagnoses. However, the ICD-9-CM system actually classifies only diagnoses and diseases. According to the introduction to the "symptoms" section, that section is only to be used when no diagnosis classifiable elsewhere is recorded. Use of the "78" section assumes that the complaint is the final diagnosis. Also, veterans' complaints listed on agent orange codesheets are often written as diseases or diagnoses. For example, almost 7 percent of 754 codesheets we reviewed contained the following complaints: schizophrenia, hypertension, bronchitis, arthritis, diabetes, dermatitis, and peptic ulcer. All of these are actually diseases or diagnoses and have specific ICD-9-CM codes.

The Projects Office director was concerned that, if the entire coding system was used to code complaints, then some complaints coded with a non-"78" code may be entered in the registry as confirmed diagnoses. We do not believe this is likely to happen, since complaints and diagnoses are clearly identified and separated on the codesheet.

VA Staff Coded Complaints More Specifically When They Used the Entire ICD-9-CM System To determine if more specific information about veterans' complaints could be obtained from the agent orange registry if VA allowed coders to use the entire ICD-9-CM system, rather than just the "78" section, we presented a list of 30 complaints to coders at each medical center visited. The complaints were randomly selected from actual codesheets (see app. I for a detailed description of how we selected the 30 complaints). We first asked the coders to code the 30 complaints using only the "78" section of the ICD-9-CM system, as they are accustomed to doing. After we received these responses, we asked the coders to recode the same complaints using the entire system.

The VA coders provided more specific information when they coded complaints using the entire ICD-9-CM system. When the coders used just the "78" section, at least half of them coded 14 complaints 78999. However, when the coders used the entire system, at least half of them coded 11 of the 14 complaints with a specific non-"78" code. For example, six of eight coders coded the complaint "depression" 78999 when they were restricted to using only "78" codes. However, when they used the entire

system to code this complaint, all eight coders coded it 311, meaning "depressive disorder, not elsewhere classified."

To further determine whether more specific information could be obtained from the agent orange registry if the entire ICD-9-CM system were used, we asked a disease classifier with 14 years' experience at the Department of Health and Human Services' National Center for Health Statistics to recode, using the entire ICD-9-CM system, 99 complaints initially coded 78999 by VA coders. These complaints were from codesheets randomly selected from those submitted to the VA central office during May 1984. The classifier recoded 70 percent of these complaints with a specific non-"78" code.

We did not assess the accuracy of the VA medical center coders' responses. However, consistency among coders increased when they used the entire classification system. When we asked the coders to use only "78" codes, at least 75 percent of them agreed on the same code to use for 13 complaints. When we asked the coders to use the entire system, at least 75 percent of them agreed on the same code to use for 19 complaints. For example, eight coders coded the complaint "recurrent boils - chest wall" with five different codes when they were restricted to using only "78" codes. Only three coders selected the most frequently used code. However, when the coders used the entire ICD-9-CM system to code the complaint, they coded it only two different ways, with six of them agreeing on the same non-"78" code. Overall, the percentage of coders in agreement increased for 20 of the 30 complaints when they used the entire ICD-9-CM system. This occurred even though coders had to choose from more codes when using the entire classification system.

We did find consistency among coders when they coded diagnoses. VA does not restrict the number of codes that can be used to identify diagnoses. As with complaints, we presented a list of randomly selected diagnoses to coders at each medical center visited. At least 75 percent of them agreed on the same code for 16 of 24 diagnoses. All coders agreed on the same code for seven diagnoses.

Codesheets Were Not Always Appropriately Completed or Reviewed The agent orange codesheet instructions require the physician to complete the second page of the codesheet, which requests medical information, but do not specify who is to complete the first page. The first page requests identifier information about the veteran and information about the veteran's military service and exposure to agent orange. In April 1983 the registry coordinator recommended to medical facilities that the

VA employee who initially interviews the veteran complete this page of the codesheet. The coordinator told us that if the veteran completes the first page, it should be reviewed by VA staff in the presence of the veteran, and if VA staff completes the first page, it also should be done in the veteran's presence.

Codesheets at five of the medical centers we visited were not being completed or reviewed in the veteran's presence or were not being completed by appropriate va staff. As a result, these centers could not be assured they were submitting accurate information into the registry. For example, the practice at the Washington Medical Center was to mail codesheets to veterans scheduled for agent orange appointments and have them complete the first page before arriving for their appointments. We were told that a VA clerk reviewed the codesheets with the veterans when the veterans arrived to assure that they had been filled out correctly. However, we examined 15 codesheets that this clerk had forwarded to the coder and found that the first page on 9 of them had not been filled out completely. Some of the missing information, such as the veteran's exposure to agent orange and the veteran's general health, might not have been available elsewhere in medical records. The coder, who reviewed the codesheets before submitting them to the data processing center, said if she could not find the correct response to the exposure questions in the medical record, she would code the response "not sure," even though the veteran might have been sure about his exposure.

Both the Fargo and Palo Alto Medical Centers relied on their coders, rather than physicians, to complete the second page of the codesheet. Physicians in Fargo filled in the diagnoses only. The coder in Fargo indicated she could not always answer the question about birth defects correctly because she could not always tell from the medical record whether a veteran's children were born before or after Vietnam service. According to the Projects Office registry coordinator, in Palo Alto the second page now is completed by the physician.

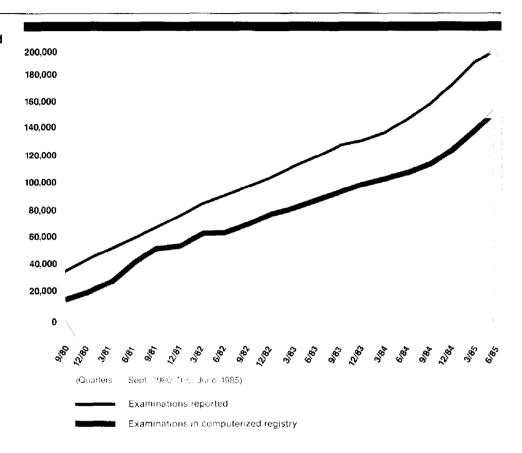
Records of All Veterans Who Have Had Examinations Are Not in the Registry According to VA program guidance, records of all veterans who had agent orange examinations since October 1, 1978, are required to be in the computerized registry. The codesheets used for entering data into the registry should have been completed by the central office for examinations given before October 1, 1979, and by the medical facilities for examinations given since that time.

In September 1978, VA gave its facilities standardized forms and program guidance for performing agent orange examinations. In April 1979 it required that these forms be submitted to the central office for all veterans who had examinations since October 1, 1978. Although a codesheet had not yet been developed, VA said the information was needed for inclusion in a registry.

In August 1979 a codesheet was developed, and medical facilities became responsible for completing them beginning with examinations given October 1, 1979. Beginning with examinations given in October 1980, va directed its medical facilities to submit the codesheets directly to the data processing center.

Since VA began the computerized registry, a discrepancy has existed between the number of examination records in the registry and the number of examinations VA medical facilities reported they have given. The discrepancy has increased over time. VA acknowledged as early as September 1980 that many veterans' examinations were not in the registry. At that time, VA's General Counsel testified before the Senate Committee on Veterans' Affairs that VA had examined about 30,000 veterans and entered data from about 12,000 of them in the registry. As shown by figure 4.1, over 47,600 of the more than 199,400 examinations reported by the medical centers as given as of June 1985 had not been entered in the registry. The discrepancy increased by 16,648 examinations, or 54 percent, from June 1983 to June 1985.

Figure 4.1: Discrepancy Between the Number of Examinations Reported and the Number in Computerized Registry



Most of the Discrepancy Was Caused by a Failure to Submit and Enter Data The major reason for the discrepancy between the number of examinations medical facilities reported they had given and the number in the registry was that examinations were not entered in the registry. Our visits to medical centers indicated that during the early years of the program, examinations were not entered in the registry because (1) medical facilities did not send the records to the central office and (2) the central office did not prepare the codesheets or pass on facilities' codesheets to the data processing center. More recently, examinations given at the medical centers we visited were not entered in the registry for various reasons, notably inadequate controls for assuring that the center submits a codesheet for every veteran who has an examination. We also found that a programming error deleted 2 months' records.

We found, for example, that:

- 1. According to Indianapolis' locator cards, 122 veterans had agent orange examinations in 1978. The registry, however, showed no veterans as having had examinations at Indianapolis that year. The Indianapolis official responsible for submitting medical records to the central office said he did not begin submitting all records until May 1979 because va's requirement was to submit records only from veterans whose symptoms were "professionally attributed" to agent orange exposure. The requirement to submit all records changed in April 1979 and was retroactive to October 1978, but the Indianapolis official said he never submitted the records from the examinations previously given.
- 2. The Fargo Medical Center could document that it sent to the central office records of 59 veterans examined in 1979, but only 47 of these veterans were in the registry.
- 3. Five medical centers had not developed a system for assuring that codesheets are completed for all agent orange examinations given. At two medical centers we found codesheets that had been prepared but, according to center officials, never got to the coders. Although VA has not required centers to develop such a system, we found instances in which use of a control mechanism may have ensured that the codesheets were completed. The control system used in Richmond illustrates how such a system might work. The Richmond coder prepared a list of all veterans who her records showed had an examination during the month. This information was verified by the clerk who scheduled the examinations.
- 4. As of June 1984, Palo Alto and Menlo Park—whose examinations are coded by Palo Alto—had only 31 records in the registry for 1982, 1983, and 1984. During this time they reported to the central office that they had given nearly 550 examinations. According to Palo Alto officials, coding agent orange codesheets is a low priority, given the center's staff shortage.
- 5. In Ann Arbor, some codesheets were not submitted to the registry because the clerk responsible for controlling the files thought codesheets should not be submitted unless the veteran completed all aspects of the examination. Although guidance to medical facilities regarding the agent orange program states that codesheets from completed examinations only should be submitted, it does not define a completed examination. Agent Orange Projects Office officials told us that if the physical examination had been given and information was available to fill out a codesheet, one should be prepared and submitted.

6. At Miami's two outpatient clinics, 13 veterans in our sample who had examinations before October 1983 were not in the registry because their codesheets were apparently submitted to the data processing center, rejected because they were incomplete, and not resubmitted for entry in the registry by June 1984. According to the Projects Office registry coordinator, the data processing center officials are now sending facilities a monthly cumulative list of rejected codesheets to help the facilities track those not resubmitted.

We also found that from October 1981 until March 1982, agent orange examination record update files were being deleted from the computer tape before they could be added to the registry's master file. After the problem was detected in March 1982, a va memorandum indicated that va staff could retrieve and add to the master file the missing records from October 1981 and from all of 1982. However, they were apparently unable to retrieve the November and December 1981 records. Thus, examination records submitted to the data processing center in those months were never entered into the computerized registry. Although we could not determine the number of examinations not entered, we noted that during these 2 months the discrepancy between the number of examinations in the registry and the number medical facilities reported they had given grew by 4,127.

The Delay in Entering Examinations in the Registry Accounts for Some of the Difference As of September 1984 it took an average of about 3 months for data reported by a facility to be entered into the registry. Medical centers reported they had given nearly 12,500 examinations during the 3-month period from July through September 1984. In addition, our visits to medical centers indicated that they experience varying delays in preparing and mailing the examination codesheets to the data processing center. For example, at the time of our visit, Indianapolis had 50 codesheets ready to mail and had given the examinations an average of 38 days before our visit. Ann Arbor had 11 codesheets ready to mail and had given those examinations an average of 135 days before our visit.

Delays are also caused by codesheets returned by the data processing center for correction of errors. We were told the data processing center rejects about 20 percent of medical facilities' codesheets because of coding and keypunching errors. At each center we visited, we reviewed all codesheets previously submitted but returned for correction at the time of our visit. Four centers had no such codesheets. For the other four, the average delay from examination date to date of our visit ranged from 75

to 205 days. For example, Miami had 14 codesheets returned for corrections. The examinations had been given an average of 155 days before our visit.

Nearly One-Fourth of Veterans Sampled Who Had Examinations Were Not in the Registry

The number of examinations in the agent orange registry applicable to the medical centers we visited was less than the number those centers reported they had given and less than the number of locator cards the centers maintained on veterans who had examinations. Twenty-two percent of the examinations in our sample were not in the registry. We were aware that we would find a large percentage difference between the number of examinations in the registry and the number of examinations reported for the medical centers visited because that factor was one consideration we used in selecting medical centers to visit.

Since the agent orange program began in 1978, vA has required its facilities to maintain a locator card on each veteran who receives an examination. Moreover, in March 1981 facilities were required to begin submitting to the central office monthly reports on the number of examinations given during the month and the cumulative number given since the program began. vA did not specify how facilities were supposed to determine the cumulative number used in the first monthly report.

At each medical center visited, we compared the number of locator cards, the number of examinations reported by the centers, and the number in the registry as of December 31, 1983. We used that cut-off date to allow a reasonable amount of time for the examinations to be entered into the registry. As indicated by table 4.2, the number of examinations in the registry was about 32 percent less than the number of examinations reported and about 25 percent less than the number of locator cards.

Table 4.2: Comparison of Number of Examinations Reported As Given, Number of Locator Cards, and Examinations in Registry

Medical center	Examinations reported as given	Number of locator cards	Examinations in registry
Ann Arbor	1,584	1,547	1,027
Fargo	1,500	1,148	1,044
Indianapolis	1,247	1,142	968
Miami	1,203	1,111	815
Palo Alto	939	882	284
Philadelphia	2,945	2,718	2,104
Richmond	319	293	271
Washington	1,147	1,001	863
Total	10,884	9,842	7,376

To estimate the number of examinations missing from the registry, we compared the names on a random sample of each center's locator cards to the names in the registry. We reviewed the medical records of veterans in the sample whose names were not in the registry to verify that they actually received an examination. The results of our sample are shown in table 4.3.

Table 4.3: Verified Examinations Not in Registry

Medical center	Sample size	Number of veterans with verified examinations not in registry	Percent of veterans with verified examinations not in registry	
Ann Arbor	308	125	41	
Fargo	231	38	16	
Indianapolis	236	24	10	
Miami	225	57	25	
Palo Alto ^a	•	•	•	
Philadelphia	551	124	23	
Richmond	59	3	5	
Washington	203	31	15	
Total	1,813	402	22	

^aWe did not include the Palo Alto sample in our analysis because we had problems selecting the sample and verifying that examinations were given. However, the registry coordinator visited Palo Alto in August 1984 and reported that about 800 examination records were not submitted to the registry. If this estimate is accurate, about 74 percent of the examinations given by the medical center are not in the registry.

Based on the number of sample veterans not in the registry but verified as having had an examination, we estimated that 1,971 veterans at the

above seven medical centers had examinations but were not in the registry. (See app. I for a detailed discussion of the sample selection and estimating procedures.)

After our site visits, va's data processing center began sending each medical facility a monthly microfiche list of veterans' names and other identifying information from its portion of the registry. The va agent orange program guidance issued in February 1985 states that facilities should compare this list to their locator cards and, if they find a veteran's name missing from the registry, prepare and submit a codesheet.

Conclusions

va has improved the agent orange computerized registry since we reported on it in October 1982. However, problems remain with the data that were entered on the 86,000 veterans in the registry before the improvements were made. In addition, the thousands of examinations not in the registry limit its use in describing the characteristics of all agent orange examinees, showing their specific health problems, and contacting veterans who received an examination. Va, however, can use the information, especially relating to veterans who received examinations since the registry was improved, if it qualifies its analyses of the data.

Further improvements are needed to assure that more specific and consistent data are obtained on veterans' complaints and that codesheets are properly completed. If all the medical centers we visited had established controls over the preparation and processing of codesheets, we believe many examinations that were not entered in the registry would have been entered.

Recommendations to the Administrator of Veterans Affairs

We recommend that the Administrator, through the Chief Medical Director:

- Revise instructions to medical centers regarding the collection of registry data. The instructions should allow coders to use the entire ICD-9-CM classification system to code veterans' complaints and require appropriate medical center officials to complete or review page one of the codesheet in the veteran's presence.
- Direct medical facilities to establish controls to assure that all codesheets are submitted to the agent orange registry.
- Qualify all analyses of registry data by stating that the records of many veterans who received agent orange examinations are not included.

Agency Comments and Our Evaluation

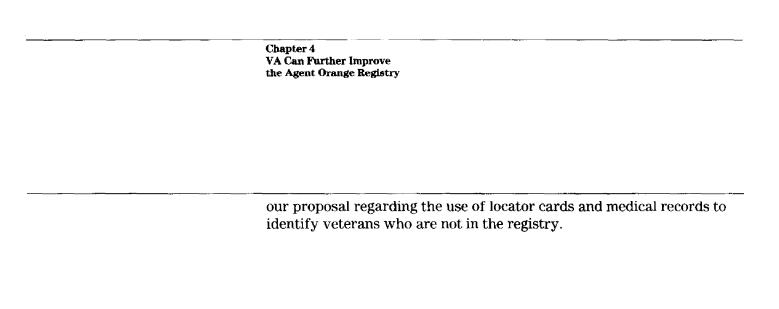
In his November 27 letter, the Administrator did not agree that coders should be allowed to use the entire ICD-9-CM classification system to code complaints. VA said that such use of the system, while increasing precision, would have little meaning. VA said that the coding of precise and accurate diagnostic information is much more important than the coding of reproducible complaint data. The director of the Agent Orange Projects Office had told us that complaint data gave VA important information about veterans seeking agent orange examinations. Our review showed that use of the entire ICD-9-CM classification system by coders at the eight medical centers we visited yielded more specific information than use of only the "78" section regarding veterans' complaints. If VA no longer values data on veterans' complaints, it should stop gathering them. If VA values that information, however, we believe it should use the entire classification system to increase the utility of the data gathered.

VA agreed that appropriate medical center officials should be required to complete or review page one of the codesheet in the veteran's presence and plans to revise program guidance to reflect this. VA also commented on the importance of codesheet submissions and plans to revise program guidance to direct medical facilities to establish a control system to ensure that all codesheets are submitted to the agent orange registry.

In a draft of this report, we proposed that VA require that medical facilities compare the monthly microfiche listing of agent orange registry participants to their locator cards and use medical records to identify veterans who have had agent orange examinations but are not in the registry.

In its comments, VA stated it would emphasize, in conference calls and other contacts, the need for facilities to compare the microfiche listing to the locator cards. We believe such emphasis will be helpful.

VA also stated that, given the size of the facilities' medical records files and the fact that some have been stored as inactive or transferred to a second facility, using medical records would be too large a task for field staff and not cost effective. VA noted that comparing the microfiche listing to the locator cards would identify a large proportion of the missing names. As long as VA qualifies its analyses of registry data by stating that the records of many veterans who received examinations are not included, we believe use of the locator cards for identifying missing names is sufficient. VA agreed that all analyses (except those intended for in-house use only) should be so qualified; therefore, we have deleted



In 1978, va and the Armed Forces Institute of Pathology agreed to establish a registry to collect tissue samples from veterans possibly exposed to agent orange in Vietnam. The registry's initial purpose was to find out what the veterans' medical problems were. In March 1983 the Institute began collecting additional samples for a study to determine if the Vietnam experience caused diseases in veterans who served there. In the study, the Institute is comparing tissue samples from a group of veterans who served in Vietnam to those from a group of veterans who served elsewhere during the same time. Va medical centers are the primary suppliers of tissue samples for this study.

Since the program was established, VA has required its medical centers to submit tissue samples to the Institute. Most centers, however, have not fully participated in the registry. The centers we visited did not fully participate because the pathologists either misinterpreted which tissue samples should be submitted or did not know how to identify these veterans' samples.

VA Requires Its Medical Centers to Submit Samples to the Institute Through program directives, VA has required medical centers to participate in the Institute's tissue registry since it was established in 1978. Until March 1982, va required medical centers to submit tissue samples from veterans "with possible exposure to herbicides during the Vietnam War." In March 1982, va changed the criterion to require medical centers to submit samples from "any Vietnam veteran, regardless of known or suspected exposure to herbicides." According to the Agent Orange Projects Office director, the criterion was changed after he found that medical centers were responding poorly to the instructions in the original directive because the centers' pathologists could not identify veterans who had been exposed to agent orange. He said he believed that asking the centers to submit samples from any Vietnam veteran would result in more samples being submitted. The March 1982 directive, however, stated that it was being issued substantially unchanged from the previous directive. As a result, the centers may not have noted the change in requirements.

In March 1983 va wrote to medical centers noting that the Institute wanted samples from all veterans who served during the Vietnam era and asking pathologists to search their files for such cases. In June 1984 va instructed its centers to submit samples from "any Vietnam era veteran" so that the Institute could get samples from veterans who had been in Vietnam and from those that had not for its comparative study. Again, however, the June 1984 directive did not call special attention to

the criterion change, but merely indicated that it was a reissue of the March 1982 directive.

Most Medical Centers Have Not Fully Participated in the Registry

As of March 1983, 78 percent of the samples submitted by VA facilities and analyzed by the Institute came from only 24 of VA's medical facilities, although all facilities should have been submitting samples. According to an Institute report, by late 1983, 30 of the facilities had submitted most of the samples in the Institute's registry. More than a fourth of the medical facilities had sent in no samples at all, and only three had contributed more than 10 samples from veterans who served during the Vietnam era but not in Vietnam.

Because most facilities have submitted so few samples, the Institute may not be able to use the samples in its comparative study. The Institute will select samples only from those facilities that have submitted 10 or more samples because it found that VA facilities that submitted fewer than 10 had a higher percentage of malignancies. According to the Institute official responsible for the study, this suggested that they did not follow the proper criterion for submitting samples (that is, submission of all tissue samples).

The Institute hopes to have 1,200 samples in each of the two groups in its comparative study. As of January 1985, it had 450 to 500 samples in each group. According to the Institute official responsible for the study, these samples came from only about 35 vA facilities.

Except for Miami, none of the medical centers we visited had submitted many samples to the tissue registry. Since 1978 Fargo, Philadelphia, Richmond, and Palo Alto had each submitted only one sample; Washington had submitted two; and Indianapolis three. Ann Arbor had submitted 12, but none since 1982. Miami had submitted 50, but these were not mailed until the time of our July 1984 visit, although the samples had been taken in 1982.

Many Pathologists Did Not Know Which Veterans' Tissue Samples Should Be Submitted

In our October 1982 report we noted a similar problem with medical centers' participation in the Institute's study. Facilities were not submitting samples because they were unaware of or misinterpreted the requirement or they had no procedures to identify which samples came from Vietnam veterans. Our visits to eight medical centers indicated that these problems still exist. Although the pathologists we interviewed were apparently aware of the requirement to submit samples, those at

five of the centers did not know which veterans' samples were supposed to be submitted. These pathologists were using a variety of erroneous criteria to determine whether a sample should be submitted.

Despite the March 1982 change in the criterion, pathologists at three medical centers visited indicated they were supposed to submit samples only from veterans who claimed agent orange exposure. They said they had no way to identify such veterans unless the documents they received indicated that the veteran claimed exposure. The few samples these facilities submitted to the Institute were ones that, for various reasons, could be identified as belonging to veterans exposed to agent orange.

The pathologist at another medical center was not sure whether he was supposed to send samples to the Institute from all Vietnam veterans or just from those who claimed exposure to agent orange. However, he was working with the dermatologist to identify and submit only skin tissue samples from veterans claiming exposure. He said he did not know if other types of samples should be submitted to the Institute.

The pathologist at another medical center submitted tissue samples only from veterans who had agent orange examinations. He said he identified these veterans from a list provided to him. Moreover, he said he did not submit all samples, as required, but only those he considered to be of major consequence.

Most Pathologists Did Not Know How to Identify Vietnam Veterans

In response to our October 1982 report, VA commented that its poor performance in submitting tissue samples was largely due to the lack of an indicator in veterans' medical records signifying that they served in Vietnam. VA noted that it established such an indicator in July 1982 which corrected the problem. In responding to VA's comments, we noted that the indicator did not apply to the outpatient program and suggested that VA direct physicians sending tissue samples to the facilities' pathology service to identify samples from Vietnam veterans.

Effective in October 1982, va changed the format of veterans' patient data cards to indicate whether the veteran served in Vietnam. Information on the patient data card is supposed to be imprinted on veterans' medical records, including documents that are sent to the pathology service on veterans receiving recurring outpatient services. Va told its medical centers of this Vietnam service indicator when it became effective and again in March 1983. The directives for submitting samples to the

Institute, however, do not explain that Vietnam veterans can be identified from the revised patient data card. Moreover, centers were not reissuing new cards to every veteran who served in Vietnam. Generally, the centers we visited were reissuing cards only if the old ones were lost, or if a new one was needed for some other reason. We were also told that the patient data card was not always imprinted on the documents sent to facilities' pathology service.

Pathologists in three medical centers we visited knew that they were supposed to submit samples from all Vietnam veterans to the Institute, but two of them said they had no way to determine if a sample came from such a veteran unless someone specifically noted it on documents they received. One of these pathologists said she did not learn how to identify veterans who served in Vietnam until a week before our visit. The one sample each of these two centers submitted to the Institute was identified as belonging to a Vietnam veteran. The third pathologist was aware that the patient data cards indicate which veterans served in Vietnam, and he used them to identify which samples should be submitted to the Institute. If the Vietnam service indicator did not appear on a veteran's records, the pathologist said he had the center's administrative staff determine whether that veteran served in Vietnam. Four of the five pathologists who did not understand the criterion for submitting samples also said they would not know how to identify Vietnam veterans.

VA Has Not Emphasized the Importance of the Registry

In our October 1982 report, we recommended that VA emphasize to its medical facilities the importance of sending tissue samples to the Institute. Except for several occasions just before and after that report was issued, we found no evidence that VA has done so. No directive on submitting samples was in effect from March 1983 until June 1984. An Agent Orange Projects Office official said reissuing the directive was the responsibility of the Pathology Service. A Pathology Service official said it was the responsibility of the Projects Office. An October 1983 memorandum in the Pathology Service's files indicated that the directive was not reissued because VA was considering whether to continue collecting tissue samples in the same manner.

The VA Pathology Service director said medical center pathologists are not responsible for determining whether a veteran served during the Vietnam era (the criterion for submitting samples since June 1984). She said if these veterans were identified for the pathologists, the pathologists would submit their tissue samples as required. However, she noted

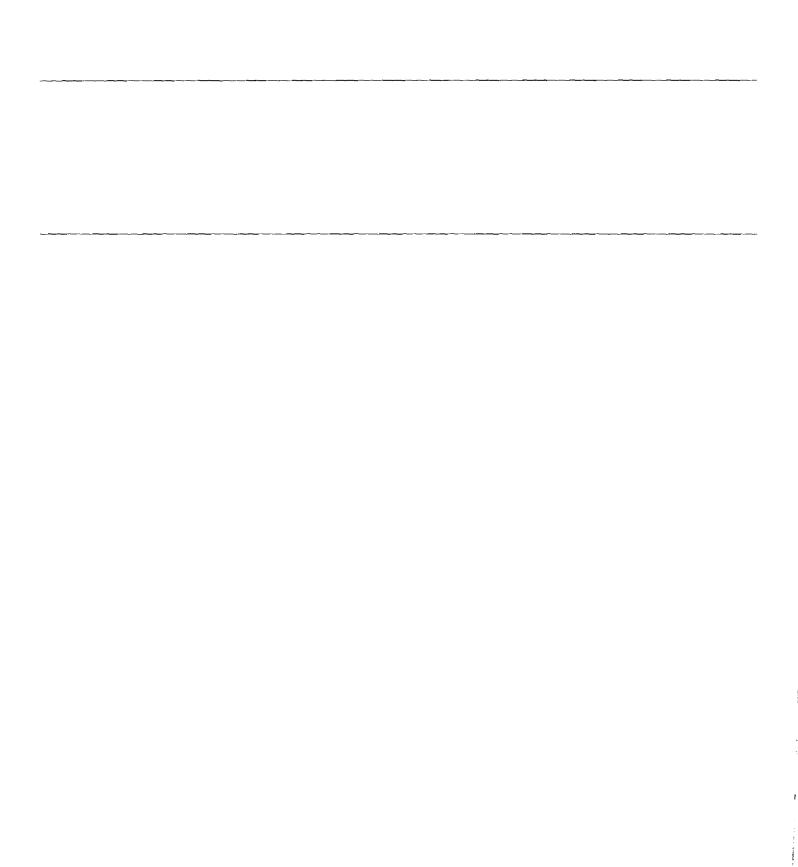
that the rapid turnover of medical center chief pathologists and the possibility that the appropriate pathologist was not receiving the directives may have contributed to the poor response to the registry.

Conclusions

Most tissue samples in the Institute's registry have come from only a few va medical centers. Pathologists at the centers we visited did not know which veterans' tissue samples were supposed to be submitted or did not know how to identify those samples. We believe that, because most pathologists did not know that Vietnam veterans can be identified from the patient data card, they also did not know that Vietnam era veterans can be identified in that way. The Vietnam era indicator is also on the patient data card.

We did not assess the desirability of the tissue registry or the validity of the Institute's study using registry samples because VA had decided that both would continue. However, VA's poor participation in the registry means that not all tissue samples that should be in the registry and in the study are included.

In a draft of this report, we proposed that va's directive on the Institute's tissue registry be revised to highlight and clarify the requirements for submitting tissue samples. The Institute advised va that it now has an adequate number of tissue samples to complete its study and recommended that va terminate submissions. va plans to issue a directive so informing its medical facilities. We therefore have dropped these proposals.



va has not clarified for its staff how section 102 of the Veterans' Health Care, Training, and Small Business Loan Act of 1981 (Public Law 97-72, Nov. 3, 1981)—which authorized priority health care for Vietnam veterans for disabilities that may have been caused by agent orange—should be interpreted and its impact measured. Va guidelines are unclear about whether to give priority health care to a veteran who served in Vietnam but does not claim exposure to agent orange and how the agent orange examination program affects eligibility for priority care under the law. As a result of the unclear guidelines, va medical centers have implemented Public Law 97-72 in different ways.

VA has attempted to measure the episodes of care provided to veterans under the law. Of the eight medical centers visited, however, one was not obtaining any of the required information, and at the other seven, 20 of the 26 clerks we interviewed did not understand how to record some of the information. Thus, VA has no assurance that the information it has been collecting on the effects of the law is accurate.

Veterans Exposed to Agent Orange Are Entitled to Priority VA Care

Section 102 of Public Law 97-72 gives Vietnam veterans who may have been exposed to dioxin the same outpatient care priority as that given to former prisoners-of-war for any disability "notwithstanding that there is insufficient medical evidence to conclude that such disability may be associated with such exposure," regardless of ability to defray medical expenses. The law also authorized inpatient care for eligible veterans without service-connected disabilities, regardless of ability to defray medical expenses. Veterans determined by vA to have service-connected disabilities had already been authorized to receive the highest priority for outpatient care and to receive inpatient care, regardless of their ability to defray medical expenses. Thus, these veterans were not affected by the law.

The report of the House Committee on Veterans' Affairs accompanying the bill that became Public Law 97-72 said:

"... the Committee is clearly indicating that until the scientific community has been able to make a determination as to the possible cause and effect relationship of the toxic herbicides utilized as defoliants in the Republic of Vietnam during the Vietnam conflict, the Veterans' Administration should do everything possible to provide the care to such veterans. When a doubt exists, the doubt should be resolved in favor of the veteran."

¹This section of the act also applies to veterans exposed to ionizing radiation.

"... it is clearly the intent that when a veteran presents himself to a VA hospital with a complaint relating to the possible adverse health effects of these agents, and when a VA physician determines the veteran needs inpatient care and treatment, he is to receive such care and treatment. In addition, when medical services to obviate the need for hospitalization are required, such veteran shall be furnished such medical services."

According to the joint statement explaining the compromise provisions of the bill that became Public Law 97-72, the House and Senate Committees on Veterans' Affairs intended that the Administrator of Veterans Affairs acknowledge that veterans claiming exposure to agent orange were in fact exposed if their military records indicate they served in Vietnam during the Vietnam era.

VA Should Clarify the Law's Requirements for Its Staff

VA has issued guidelines saying it generally will accept Vietnam veterans' claims that they were exposed to agent orange, but the guidelines do not say whether VA should give priority health care to veterans who served in Vietnam but do not claim exposure. VA guidelines also do not clearly state whether a Vietnam veteran needs an agent orange examination to receive priority care and whether agent orange examinations should be given on a priority basis under Public Law 97-72.

VA central office officials we interviewed did not interpret the guidelines the same way. A lawyer in the office of the VA General Counsel and the chief of VA's Policies and Procedures Division, Medical Administration Service, both said a veteran does not have to claim exposure to agent orange to be eligible for priority care. According to the General Counsel lawyer, the burden of determining possible exposure should not be on the veteran. The Agent Orange Projects Office director, however, interpreted the guidelines as requiring a veteran to claim exposure to receive priority care.

VA guidelines require VA to provide a physical examination and laboratory tests in accordance with the agent orange program guidance to Vietnam veterans who request medical care under the provisions of Public Law 97-72. Although a VA General Counsel lawyer, a Medical Administration Service official, and Agent Orange Projects Office officials agreed that a veteran need not have had an agent orange examination to receive priority care, the guidelines have been interpreted to

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mean that veterans must have an agent orange examination to be eligible for priority care. The General Counsel lawyer said the reference to the agent orange examination in the law's implementing guidelines was VA's attempt to encourage veterans to participate in the registry. He said the law was in no way related to the examination program.

As a result of the unclear guidelines, the VA medical centers have implemented Public Law 97-72 in different ways. We discussed the relationships of priority care under that law and the agent orange examination program with officials at seven of the eight medical centers we visited and seven other centers we telephoned.

- Officials at nine of these centers told us they gave priority to veterans either for (1) their agent orange examination and associated consultations only or (2) their agent orange examination and treatment of disabilities identified during that examination.
- Officials at three centers told us they gave priority to Vietnam veterans for their agent orange examination and treatment of any disabilities possibly related to exposure regardless of when identified.
- Officials at two centers told us veterans receive priority care whether or not they have had an agent orange examination.

Despite the varying interpretations of the guidelines, officials at the medical centers we visited told us Public Law 97-72 did not affect the care they give to veterans possibly exposed to agent orange because the centers are able to provide care to most eligible veterans who need care regardless of their priority. Officials at two centers we visited said that, due to excess demand, they had one or more clinics that did not accept appointments from any veteran without service-connected disabilities. Officials at three other centers said in some clinics veterans without service-connected disabilities may wait longer for appointments than veterans with service-connected disabilities. The priority system thus becomes important only when available resources are insufficient to meet demand. This is expected to occur over the next several years as the number of veterans over age 65 increases substantially.

VA Medical Centers Were Not Following Procedures for Measuring the Law's Impact

Although the law does not require it, VA has established a system for reporting how many episodes of care its medical facilities provided to veterans as a result of Public Law 97-72. However, our visits to eight medical centers showed that staff at those centers did not follow the required procedures for determining the episodes of care provided. Moreover, VA's reporting format and instructions to medical facilities regarding how to code information about the care they provide need to be more specific.

va requires its medical centers to gather information about veterans' outpatient visits, including medical care provided for conditions possibly related to agent orange exposure. Medical center administrative staff must ask veterans whether they served in Vietnam and whether they claim exposure to agent orange. When the answer to either question is positive, staff must indicate whether they were admitted for inpatient or outpatient care, or are in the process of receiving care, for a condition possibly related to exposure. Medical center clerks code this information on documents they prepare for each outpatient visit, and centers accumulate monthly statistics, which are combined into a Vawide report.

To determine whether required procedures were being followed at the medical centers visited, we interviewed 26 clerks who code the information on the documents. Clerks at Palo Alto were not obtaining any of the information on medical care provided for conditions possibly related to agent orange exposure. At the other seven centers visited, 20 of the 26 clerks interviewed did not record the information as VA required. Ten of these clerks said they always used the code meaning the veteran was receiving care for a condition other than one possibly related to agent orange exposure, regardless of what the veteran's problem was. In addition, one clerk said she thought the code for "Receiving medical care for a condition other than one possibly related to exposure to Agent Orange" meant that the veteran claimed exposure and was therefore entitled to care. Another clerk said that if a veteran served in Vietnam but did not claim exposure, she did not complete the section regarding care provided for conditions possibly related to exposure. A third clerk used the code for "Receiving medical care for a condition possibly related to exposure to Agent Orange" to mean the veteran had problems unrelated to exposure.

The document used to report care provided to veterans possibly exposed to agent orange precludes an accurate count of veterans claiming exposure because the document can be coded only to indicate if the veteran

does or does not claim exposure. If a veteran is unsure about exposure, the medical center clerk must decide whether to code this as a positive or negative response. Some clerks we interviewed coded this response one way, while others coded it the other way.

Also, the instructions for reporting care provided do not advise medical center staff how to decide which conditions may be possibly related to exposure. The guidelines implementing Public Law 97-72 note that the physician is responsible for determining whether a veteran's condition resulted from a cause other than exposure. According to the guidelines, if the physician finds that a veteran has a condition not ordinarily considered to be due to exposure, the decision and its basis are to be clearly documented in the medical record. The instructions for reporting care provided, however, do not refer to the implementing guidelines or otherwise suggest how the clerical staff who compile these statistics should determine whether a veteran's condition may possibly be related to exposure. Twelve of the 26 clerks we interviewed did not consult the physician or the medical record to determine the proper coding for the care provided.

Because of the extensive work that would have been required, we did not attempt to determine an accurate count of the episodes of care provided to veterans under Public Law 97-72. However, because (1) one medical center visited did not record any information on care provided for conditions possibly related to agent orange exposure, (2) 20 of the 26 clerks interviewed at the other medical centers visited did not understand the requirements for reporting such episodes of care, and (3) the reporting format and instructions are not specific, VA does not have reasonable assurance that the data it is collecting on the effect of this law are accurate.

Conclusions

With the anticipated increase in demand for VA services, VA facilities may find it increasingly necessary to implement the priority system provided by Public Law 97-72 in order to care for veterans possibly exposed to agent orange. When this happens, a consistent interpretation of the law and its implementing guidelines and the number of veterans affected by it will become more important. VA needs to clarify whether veterans must claim exposure to agent orange to be eligible for priority care and the relationship between the law and the agent orange examination program. In addition, if VA wants to quantify the law's impact, it should improve its reporting system.

Recommendations to the Administrator of Veterans Affairs

We recommend that the Administrator, through the Chief Medical Director,

- clarify whether a veteran must claim exposure to agent orange to be eligible for priority care under Public Law 97-72 and clarify the relationship between the law and the agent orange examination program and
- revise the instructions for reporting episodes of care provided under Public Law 97-72 to include a code for veterans unsure of their exposure and a description of how staff should determine whether an episode of care was for a condition possibly related to exposure.

Agency Comments and Our Evaluation

In his November 27 letter, the Administrator concurred with our recommendation on the need to clarify whether a veteran must claim exposure to agent orange to be eligible for priority care under Public Law 97-72 and to clarify the relationship between the law and the examination program. VA plans to revise guidelines implementing the law to state that a verified claim of service in Vietnam constitutes the required contention of exposure and establishes eligibility for medical care under the law.

Regarding the relationship of the law to the examination program, VA stated that the two are unrelated, although health care personnel seeing a Vietnam veteran patient for the first time may reasonably suggest that the veteran undergo the agent orange examination before being accepted for treatment (if that patient is not acutely or severely ill). VA plans to revise its guidelines implementing the law to state that a veteran who served in Vietnam and requests VA medical care will receive a physical examination and appropriate diagnostic studies which may, but need not be, the agent orange examination.

VA concurred with our recommendation to revise the instruction for reporting episodes of care under Public Law 97-72. VA plans to revise the instructions to direct medical facility staff to record the reply of a veteran who is in doubt about exposure as if the veteran claimed exposure. VA commented that medical facility staff are unable to determine if a veteran's condition is possibly related to exposure. We believe that, if this is the case, staff should not be asked to record whether the condition was related to exposure.

Technical Description of Methodologies Used to Sample and to Assess Coding

Technical Description of Sampling Methodology

To verify that the names of veterans who received agent orange examinations at the medical centers we visited also appeared in VA's agent orange registry, we collected data from two sources:

- 1. Agent orange registry. VA's data processing center in Austin, Texas, gave us printouts of all agent orange examination records in the portion of the computerized registry from the eight medical centers we visited. These records included the names of all veterans in the registry from the beginning of the program in 1978 to the first week of June 1984.
- 2. Agent orange examination locator cards. Since 1978, VA medical facilities have been required to maintain locator cards on all veterans who requested an agent orange examination. Included on each card should be the veteran's name, social security number, address, and dates of initial and any follow-up examinations.

Identification of the Universe and Development of the Sampling Plan

We selected a random sample of locator cards for each of the eight medical centers visited. At one center, we supplemented the locator cards with a list of veterans who had requested an agent orange examination. This was necessary because the center did not routinely complete a locator card for each veteran receiving an examination. The procedures used to identify the universe and select samples of locator cards are presented below.

We eliminated from the universe locator cards that fell into either of two categories:

- Cards indicating that an agent orange examination had been scheduled but the veteran did not report for the examination.
- Cards indicating that the agent orange examination was conducted after December 31, 1983. We used this date to allow examination data to be entered in the registry in time to be included in the printouts provided us.

At each site, we categorized all remaining locator cards by the year of examination. For locator cards that lacked an examination date, an additional category, "no year," was formed.

At each facility, we selected a 20-percent random sample from each year from 1978 to 1983 and from the "no year" category. We compared the names from sampled locator cards to the names in the computerized agent orange registry to identify veterans from each medical center who

Appendix I
Technical Description of Methodologies Used
to Sample and to Assess Coding

did not appear in the registry. As long as the name and social security number were identical or reasonably similar, we considered the two a match.

Verification of Examinations

We attempted to review medical records of all veterans in the sample whose name did not appear in the registry to determine if they actually received an agent orange examination. We considered evidence of an examination to be documentation that an examination occurred. In 16 percent of the cases we were unable to review medical records because they could not be located, were retired, or had been transferred to another facility.

Estimating the Number of Veterans Not in the Registry

From our sample, we estimated the number of veterans with verified agent orange examinations not found in the registry. We did not make estimates for one medical center because, primarily due to documentation problems, we had difficulties selecting a sample and verifying that veterans received an examination. The universe of locator cards for the seven remaining sites was 8,960, and the random sample size was 1,813. The sample size was not exactly 20 percent of the universe because of rounding and because at five locations we excluded duplicate cards from the universe after selecting the sample.

Because we selected a random sample of locator cards at each of the medical centers we visited, each estimate developed from the sample has a measurable precision, or sampling error. The sampling error is the maximum amount by which the estimate obtained from a random sample can be expected to differ from the true universe characteristic (value) we are estimating. Sampling errors are usually stated at a certain confidence level—in this case 95 percent. This means the chances are 19 out of 20 that, if we reviewed all locator cards at the seven medical centers, the results would differ from the estimates obtained from our sample by less than the sampling errors of the estimates.

Table I.1 gives a visual explanation of our sampling.

Table I.1:Summary of Universe and Sample Used to Determine Number of Examinations Not in Registry

			Sample cards w examination regist	s not in	Sampling error (±)	Total estimated locator cards with verified examinations not in	Sampling
Facility	Universe Sample	Number	Percent	(in percent)	registry	error (±)	
Ann Arbor	1,547	308	125	41	5	634	77
Fargo	1,148	231	38	16	4	184	46
Indianapolis	1,142	236	24	10	3	114	34
Miami	1,111	225	57	25	5	278	56
Philadelphia	2,718	551	124	23	3	625	82
Richmond	293	59	3	5	5	15	15
Washington	1,001	203	31	15	4	150	40
Total	8,960	1,813	402	22	2"	1,9714	179ª

^aSampling errors/estimates are not additive

Methodology Used to Assess Specificity and Consistency of Coding

To assess how specifically and consistently coders at the medical centers we visited coded veterans' symptoms (complaints), we asked them to code a list of selected complaints. We asked coders to first code the complaints using only those codes from the section of the ICD-9-CM system that the Agent Orange Projects Office requires them to use when coding complaints. We then asked the coders to code the same complaints using codes from the entire ICD-9-CM system.

To assess consistency of medical center staffs' coding of diagnoses in the agent orange registry, we also asked them to code a prepared list of physicians' diagnoses. We asked the coders to code the diagnoses using codes from the entire ICD-9-CM system, as they do when completing agent orange codesheets.

We obtained responses from all 12 of the coders who code agent orange codesheets at the eight medical centers visited. In Miami, we obtained responses from four coders. We instructed the Miami coders to complete the lists of complaints and diagnoses under the same conditions they work under when they complete the agent orange codesheets. Since these coders said they normally work together to complete the codesheets, and since their responses on the lists of complaints and diagnoses were nearly identical, we counted their responses in our analyses

¹See page 31.

Appendix I Technical Description of Methodologies Used to Sample and to Assess Coding

as one. Whenever the four coders were not unanimous in their responses, we chose the response given by the majority. The responses were evenly divided for one complaint, so we did not use any of the responses in this instance. We obtained responses from two coders in Philadelphia and from one coder in each of the remaining six medical centers. Our analyses did not include the Washington Medical Center coder's responses to the first list of complaints or the diagnoses because we inadvertently gave her complaints and diagnoses that were already coded.

Selecting Complaints and Diagnoses

We prepared a list of 30 veterans' complaints and 25 physicians' diagnoses to give each medical center coder. The complaints and diagnoses were randomly selected from those written on codesheets submitted to the VA central office during May 1984. We obtained all the codesheets more than 750—that were submitted during that month from 20 percent of the medical facilities. We selected every fifth facility from a list of facilities that submit codesheets. No codesheets were available from three of the facilities selected. We listed every complaint exactly as it appeared on the codesheet. We also listed three diagnoses per facility exactly as they appeared on the codesheet. The three diagnoses may have come from the same codesheet or from three different codesheets. Once we found three diagnoses per facility, however, we did not list additional ones. From these lists we randomly selected 30 complaints and 25 diagnoses. Before we analyzed the responses, we deleted one diagnosis because we were not certain we presented it to the coders exactly as it was written on the original codesheet.

Developing an Instrument to Present to Coders

We presented the selected complaints and diagnoses to each medical center coder in a document entitled <u>Medical Records Survey</u>. The first section of the document asked coders questions about their experience and training. It also asked if they referred to the medical records when coding complaints or diagnoses on the agent orange codesheets. If they indicated that they did, we gave them a copy of the medical records associated with the complaints and diagnoses.

The second section of the document listed the complaints and diagnoses and asked coders to code them. We preprinted "78" as the first two digits of the complaint code, as is done on the agent orange codesheet. After we received the coders' responses to this section, we gave them the third

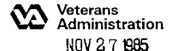
Appendix I
Technical Description of Methodologies Used
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section of the document, which again listed the 30 complaints but without the preprinted "78." We instructed the coders to use the entire ICD-9-CM system to code these complaints.

We compared the coders' responses for the complaints listed in the third section to the responses in the second section to determine if the coders were more consistent and specific when they coded complaints using the entire ICD-9-CM system. We analyzed the coders' responses to the diagnoses listed in the second section to determine how consistently they coded diagnoses.

Advance Comments From the Administrator of Veterans Affairs

Office of the Administrator of Veterans Affairs Washington DC 20420



Mr. Richard L. Fogel
Director, Human Resources Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Fogel:

Your October 7, 1985 draft report "Agent Orange: VA Needs to Further Improve Its Examination and Registry Program" has been reviewed. The Veterans Administration (VA) agent orange examination and registry program is a complex one touching many areas of medical and administrative personnel in many VA facilities.

As a supplement to the work the General Accounting Office (GAO) did concerning this program, the Department of Medicine and Surgery Pathology Service undertook a telephone survey of 28 VA facilities, contacting Medical Administration Service (MAS), medical staff, and Laboratory Service. The Chief, Laboratory Service or a staff pathologist at each of these facilities was interviewed on the degree of compliance with the agent orange examination program at their respective facilities. The program was found to be good to excellent in 20 facilities and fair to poor in 8. Based on this survey, it was concluded that success in implementing the agent orange examination program depends on the degree of participation by MAS, the medical staff, and Laboratory Service. In affiliated VA facilities, we found that medical residents who rotate through the medical program may not be aware of the agent orange program during their relatively brief rotation period. Without exception, we found that the pathologists at the 20 VA facilities with good-to-excellent compliance were aware of the circulars and were complying with policy.

A 23-minute video tape, describing various procedures to be followed relating to the agent orange program, has been developed for use in training MAS personnel at all VA medical centers. We expect to distribute this tape by March 1986. In addition, we will continue to emphasize the importance of the agent orange examination and registry program with conference calls, newsletters, personal letters, and by updating policy documents. My comments on the recommendations and implementation plans for the recommendations concurred in are enclosed.

Thank you for the opportunity to review this report.

Sincerely,

Deputy Administrator • For

HARRY N. WALTERS Administrator

Enclosure

VA'S RESPONSE TO THE DRAFT REPORT "AGENT ORANGE: VA NEEDS TO FURTHER IMPROVE ITS EXAMINATION AND REGISTRY PROGRAM"

GAO recommends that I, through the Chief Medical Director,

- --specify in VA program guidance that, to the extent practical, facilities give veterans agent orange examinations within 30 days of the request date and
- --require facilities to report the number of examinations pending for more than 30 days at the end of each month.

Although the VA places a high priority on handling and scheduling agent orange examinations, I cannot concur in a recommendation that would impose a time limit that may be impossible to enforce. The number of requests for agent orange registry examinations varies widely from time to time and from medical facility to medical facility. VA Circular 10-85-29, paragraph 14 "Possible Exposure of Veterans to Herbicides During the Vietnam War, RCS 10-0102" states "There is a high priority concern for prompt handling and scheduling Agent Orange examinations. Facilities should make every effort not to have 50 or more Agent Orange examinations pending at the end of the month. Facilities having 50 or more ... will be contacted ... to ascertain the plan of action to be implemented in reducing the backlog and to determine how many examinations are pending beyond 30 days." This directive has been reinforced in conference calls to VA medical facilities and in personal calls from the Agent Orange Projects Office registry coordinator to individual delinquent facilities by repeated references to a "30-day period" as a maximal desirable wait before examination.

I cannot concur in the second part of this recommendation because VA medical centers and clinics use centralized scheduling units to make appointments for agent orange examinations as well as all other clinic appointments. The Medical Administration Service has not found a need to note the request date for all appointments on the appointment schedule. Without requiring that the entire scheduling system be revised to make such notation routine just for agent orange examinations, there is no feasible way for the medical centers to routinely calculate and report the number of examination requests made 30 or more days before a specified date. The current system for reporting the number of pending scheduled examinations has proved simple and identifies most, if not all, delinquent facilities.

GAO recommends that I, through the Chief Medical Director,

--increase the monitoring of medical center compliance with the requirement to send complete and timely letters to veterans informing them of the results of their agent orange examinations, including laboratory tests, by such means as increasing the number of field visits made by central office staff. I agree with this recommendation; the timely and complete reporting of the results of the agent orange registry examinations by letter is important. VA Circular 10-85-29, paragraph 8, directs that "... a follow-up letter will be sent to each veteran explaining the results of the examination and laboratory studies. Follow-up letters will be mailed to the veteran within two weeks of the initial examination appointment. The only exception to this time frame will be the case when a consultation at a specialty clinic is requested as part of the initial examination process." Compliance with this requirement is routinely monitored during site visits by Agent Orange Projects Office personnel. However, the current size of the Agent Orange Projects Office staff and travel budget restrict expanding the number of field visits at this time. The importance of timely letter notification will be repeatedly emphasized during future bimonthly conference calls to VA facilities. To impose the considerable burden of instituting a tracking system for delinquent letters on field staff would not be cost effective, considering the work with which it would interfere.

GAO also recommends that I, through the Chief Medical Director,

--revise instructions to medical centers regarding the collection of registry data. The instructions should allow coders to use the entire ICD-9-CM classification system to code veterans' complaints;

I do not concur. The VA requires the use of the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) for coding symptoms or complaints using the "78" series of items, knowing that it is far from ideal. However, I do not agree with GAO's recommendation that coders should be allowed to use the entire ICD-9-CM classification system to code complaints. The ICD-9-CM system is designed primarily to encode diagnoses and I believe that use of its general sections to encode symptoms and complaints, as GAO recommends, would result in a hodge-podge mixture that would have little meaning. The "test" conducted by the GAO evaluators verified an increase in the precision; that is, the reproducibility of the results, without attesting to their accuracy, significance, or utility. The most valuable clinical information on the code sheet is the diagnosis. I believe it is much more important that diagnoses be precisely and accurately encoded than that symptoms or complaints be reproducibly encoded.

--require appropriate medical center officials to complete or review page one of the code sheet in the veteran's presence;

I concur. The proper use of the first page of the Agent Orange Registry code sheet (VAF-10-9009) has been discussed with the field staff. Its completion is monitored at the Austin, Texas VA Data Processing Center, as well as by the staff of many VA medical centers. Despite these precautions, omissions and errors in completing the form continue to occur. To correct this, the following statement will be added to paragraph 16 of Circular 10-85-29 which is being revised. "It is especially important that a VA employee be available to assist a veteran while he completes VA 10-9009 and to assure that all information has been provided before he is referred to the clinician for examination. If the veteran has difficulty completing the form, the VA employee should do it for him or her, entering the response to each segment. To further ensure the form's completeness the clinical examiner will review it and, if necessary, enter missing items at the veteran's direction."

-require centers to establish procedures to enable pathologists to identify Vietnam era veterans who do not have a revised patient data card or whose patient data card information is not imprinted on the documents sent to the pathologist. Such procedures could include having the centers' administrative staff determine whether a veteran served in Vietnam.

The Armed Forces Institute of Pathology has advised the VA that they now have an adequate number of tissue specimens on hand to complete their study, and recommends that VA terminate the submission of tissue from Vietnam era veterans. The Department of Medicine and Surgery will issue a Circular so informing VA medical facilities.

GAO recommends that I, through the Chief Medical Director,

--clarify whether a veteran must claim exposure to agent orange to be eligible for priority care under Public Law 97-72 and clarify the relationship between the Law and the agent orange examination program.

I concur. Any veteran who served in Vietnam is deemed to have been exposed to agent orange since it has not proved feasible to determine precisely who was and who was not exposed to the herbicide within that country. To clarify this point, the following sentence will be added to paragraph 1 of Circular 10-84-143, "Guidelines for Implementation of Legislation Related to the Provision of Health Care Services to Veterans Exposed to Dioxins."

"Inasmuch as the VA presumes that a veteran was exposed to phenoxy herbicides during any service in Vietnam, a verified claim of such incountry service constitutes the required contention of exposure and establishes eligibility for medical care within the provisions of this circular."

The Public Law 97-72 provisions for health care of Vietnam veterans are unrelated to the agent orange examination program. In other words, a veteran may be examined under the operation of the registry without receiving health care as provided by the Law. This is likely to occur if the veteran does not require care or elects to receive it elsewhere. Conversely, the veteran may be accepted for hospital or outpatient care under the provisions of Public Law 97-72 and the guidelines in Circular 10-84-143 without ever receiving the agent orange registry examination.

It is altogether reasonable for health care personnel seeing a Vietnam veteranpatient for the first time, if that patient is not acutely or severely ill, to suggest that the veteran undergo the agent orange examination before being accepted for treatment. The examination is general and thorough and can well evaluate the need for care as well as the nature of that need. The veteran would then be referred to inpatient or outpatient care if the clinical condition warrants one or the other. The veteran would be denied care if there was no need for it. To clarify this issue, the first sentence of paragraph 4 of Circular 10-84-143 will be amended and a second sentence added as follows: Appendix II
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of Veterans Affairs

"4. Each veteran who served in the Republic of Vietnam and who requests VA medical care will be evaluated clinically by means of a physical examination and appropriate diagnostic studies. This may, but need not be, the examination as prescribed in DM&S Circular 10-85-29, 'Possible Exposure of Veterans to Herbicides During the Vietnam War'."

GAO also recommends that I, through the Chief Medical Director,

-revise the instructions for reporting episodes of care provided under Public Law 97-72 to include a code for veterans unsure of their exposure and a description of how staff should determine whether an episode of care was for a condition possibly related to exposure.

I concur. The recording of claims of exposure to agent orange will be clarified by amending Manual Chapter M-1, Part 1, Chapter 17, Change 3, Appendix 17B, adding to the instructions under "In Block 2" the following direction: "When the veteran is in doubt, record reply under (claims exposure to Agent Orange)." This change in directions to the staff can clarify the recording of this exposure information and make the report more precise, but not necessarily more accurate. The field staff is unable to determine if a veteran's condition is possibly related to exposure but will record only the veteran's statement of his or her exposure.

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--direct medical facilities to establish controls to ensure that all code sheets are submitted to the agent orange registry;

I concur. VA Circular 10-85-29, paragraph 15 states: "A monthly submission of code sheets will be sent to the Data Processing Center in Austin, Texas according to the mailing schedule listed in paragraph 17...." The importance of this requirement has been repeatedly emphasized over the past years and some VA medical centers have established their own control systems. Revised Circular 10-85-29 will direct medical facilities to establish a control system to ensure that all code sheets are submitted to the agent orange registry.

--direct medical facilities to use available information, such as locator cards and medical records, to identify veterans who are not in the registry, and to submit code sheets on these veterans;

I concur. VA Circular 10-85-29, paragraph 16, states that "A microfiche listing ... will be generated monthly.... This microfiche listing should be reviewed with the 3x5 card file index to assure that all registry code sheets have been accepted. If there are names missing from the microfiche listing, prepare a code sheet and resubmit to the DPC." This comparison and resubmission of missing entries should capture a large proportion of delinquent reporting. The need to do the comparison and resubmission will be emphasized in conference calls and in other contacts, by phone or letter, with VA medical centers. Comparing the locator cards with medical records would uncover more missed entries, but given the size of the facilities' medical records files, the fact that older ones have been stored as inactive, and others have been transferred to a second medical center, it presents a task too large for the field staff and is not considered cost effective.

--qualify all analyses of registry data by stating that the records of many veterans who received agent orange examinations are not included.

I concur. It has never been VA policy to représent the information in the agent orange registry as including the entire Vietnam veteran population, an unbiased random sample of that population, or all of the veterans who have been examined in the special agent orange program. All examination data are not in the registry because data from examinations conducted during initial program implementation are not included. In addition, there is a lag time between the date of examination and the appearance of examination results in the registry. Nearly all analyses of registry data have been for in-house use where a qualification is not necessary. Others, used in speeches or presentations, are qualified, as GAO recommends. This policy of defining the restricted significance of the registry data will continue.

GAO recommends that I, through the Chief Medical Director, revise VA's directive on the Armed Forces Institute of Pathology (AFIP) tissue registry to

- --highlight the importance of submitting tissue samples for all Vietnam era veterans to the Institute,
- --explain that pathologists can identify Vietnam era veterans from such means as the veterans' revised patient data card, and