Agent Orange and Its Use In Vietnam

Agent Orange was a herbicide used in Vietnam to defoliate trees and remove cover for the enemy.

Shipped in orange-striped barrels, Agent Orange was a reddish-brown liquid containing two herbicides: 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) and 2,4-dichlorophenoxyacetic acid (2,4-D).

One of the herbicides -- 2,4,5-T -- was contaminated in the manufacturing process with 2,3,7,8-tetrachlorodibenzo-p-dioxin, also known as TCDD or, more popularly, as dioxin.

The history of herbicides for military use dates to World War II. During the early part of the war, interest arose in chemicals that could be used for crop destruction. Two chemicals were developed as a result of those early efforts -- 2,4-D and 2,4,5-T. Although neither chemical was used in World War II, the value of their use in weed and brush control programs was recognized. Hence, both chemicals have been used widely throughout the world since the 1940s by farmers, foresters and homeowners.

Various chemical herbicides were sprayed in Vietnam at different times -- during different years as well as different seasons because of the variety of vegetation and environmental conditions.

Agent Orange spraying missions in Vietnam were conducted from March 1965 through June 1970.

Dioxin is of concern because animal studies have shown it to be toxic to certain species. Its possible health effects on humans are the focus of numerous federal, state and private-sector studies.

VA’s Agent Orange Registry And Examination

The Agent Orange Registry represents VA’s efforts to identify Vietnam veterans who are concerned about the possible health effects of Agent Orange exposure. Registry data also are used in reviewing the types of medical problems these veterans are experiencing.

Veterans who Want to receive an Agent Orange examination should contact the nearest VA medical center or outpatient clinic and request an appointment for an examination. An appointment can be arranged, generally, within two to three weeks. Eligible veterans currently receiving treatment in VA medical centers and outpatient clinics also are provided the opportunity to participate in the Agent Orange Registry and to receive a thorough examination.

Information gathered in the examination is documented in the veterans’ permanent medical record. This information also is entered into the computerized VA Agent Orange Registry data bank. The examination in and of itself does not constitute “filing a claim.”

The Agent Orange Registry examination includes a complete medical history and a complete physical examination. Veterans are asked a series of questions concerning military service and possible exposure to herbicides in Vietnam, health complaints and evidence of birth defects in their children.

Veterans participating in the Agent Orange Registry are given the following baseline laboratory studies:
- complete blood count,
- urinalysis,

SPECIAL ISSUE

"Agent Orange Review" is prepared by VA’s Office of Public and Consumer Affairs. The “Review” is published periodically throughout the year as part of VA’s expanded program to provide information on Agent Orange to concerned veterans and their families.

This special issue inaugurates the second year of publication. For those newly added to our mailing list, this issue includes some information covered in previous issues. Also covered is new information or updated material. The subjects include:
- the properties of Agent Orange and its use in Vietnam,
- Agent Orange research, including a table of some of the research related to Agent Orange and the Vietnam experience,
- VA’s Agent Orange Registry and examination,
- veterans’ entitlements under Public Law 97-72,
- procedures for filing claims possibly related to Agent Orange exposure, and
- sources of Agent Orange information.

For additional copies of this issue, write VA’s Office of Public and Consumer Affairs (064), 810 Vermont Ave. NW, Washington, DC 20420. See pg. 4 of this issue to find out how to get on the mailing list for the "Review?"
Health-Care Services Under Public Law 97-72

In order to provide concerned, eligible veterans with appropriate medical care and treatment for illnesses or disabilities possibly related to Agent Orange exposure, Public Law 97-72 -- the Veterans' Health Care, Training and Small Business Loan Act of 1981 -- was signed on Nov. 3, 1981. PL 97-72 authorizes VA to provide certain health-care services to any veteran of the Vietnam era (August 5, 1964-May 7, 1975) who, while serving in Vietnam, may have been exposed to dioxin or to a toxic substance in a herbicide or defoliant used for military purposes. Health-care services may not be provided under this law for the care of conditions that are found to have resulted from a cause other than exposure to these substances.

Types of Health Care

Health-care services authorized are limited to hospital and nursing home care in VA facilities. Outpatient care may be provided at a VA facility:

- in order to prepare a veteran for hospitalization,
- in order to complete inpatient care that was initiated in a VA hospital or
- in order to provide care that would make unnecessary the need for hospitalization.

These services will be provided without regard to the veteran's age, service-connected status or the ability of the veteran to defray the expenses of such care.

Veterans are furnished outpatient care under this authority within the limits of VA facilities' capacity to provide such care. Outpatient services may be provided on a fee-basis only in connection with post-hospital care and then only where VA or other government facilities lack the capability to provide the needed care or cannot do so economically because of geographical inaccessibility. In providing outpatient care under this law, VA is charged with assuring that veterans will be accorded priority ahead of other non-service-connected veterans and equal to former POWs.

VA guidelines provide that a complete medical history, physical examination and appropriate diagnostic studies be developed for each veteran who served in Vietnam and who requests VA medical care. For those who have been examined within the prior six months, only those procedures that are medically indicated by the current circumstances will be repeated. If findings reveal a condition requiring treatment, the responsible staff physician must determine whether the condition resulted from a cause other than the exposure to Agent Orange.

Health-Care Exceptions

Health-care services may not be provided under this law for the care of conditions that are found to have resulted from a cause other than the specified exposure. The physician will consider that the following types of conditions are not ordinarily considered to be due to such exposure:

- congenital or developmental conditions (conditions that a veteran was born with or are hereditary);
- conditions that the veteran had before;
- conditions resulting from an injury;
- conditions having a specific and well-established cause, e.g., tuberculosis, gout; and
- common, well-understood conditions such as inguinal hernia or acute appendicitis.

A physician may believe that a veteran requires care for any of these conditions and presents a complicating circumstance that makes the provision of care under this authority appropriate. He or she may decide to provide it following consultation with the facility chief of staff and the environmental physician. PL 97-72 provides for health care only. A determination that a veteran is eligible for care under this law does not constitute a basis for service-connected disability or in any way affect determinations regarding service-connected disability.

Individual veterans should contact the nearest VA medical center to determine their eligibility. Any military records that the veteran has should be brought to the medical center in order to speed the process of eligibility and care and ensure a more complete medical history. Veterans who are not provided needed medical care under Public Law 97-72 may be furnished care if they are eligible under any other statutory authority.

Federal Agent Orange Research Projects

More than 60 federally sponsored research efforts currently are being conducted by VA, the Department of Defense, the Department of Health and Human Services and other federal agencies. See pg. 3 of this issue for a table of some of these research efforts related to Agent Orange and the Vietnam experience.

These federal studies are coordinated by the White House Agent Orange Working Group, which oversees the projects and distributes study findings to the public.

The American Legion and twenty state Agent Orange Commissions or programs also are conducting research and outreach activities on the possible health effects of Agent Orange exposure.

(Registry, from page 1)

- routine lab tests and
- chest X-ray if one has not been taken within the past six months.

Additional diagnostic studies are performed and consultations obtained, if so indicated by the examination and laboratory findings.

The medical center's environmental physician discusses with the veteran examination and test results available at the time the examination is completed. During the interview, veterans can discuss any health concerns they have as these concerns relate to herbicide exposure.

Following the examination and review of the examination records by the environmental physician, followup letters that explain the examination and lab results are sent to each veteran. Veterans are encouraged to schedule followup examinations so VA can obtain additional information on any possible long-term health effects of Agent Orange exposure.
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>AGENCY</th>
<th>DESCRIPTION</th>
<th>PROJECTED COMPLETION DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam Veteran Mortality Study</td>
<td>Veterans Administration</td>
<td>To compare mortality patterns and specific causes of death between those veterans who served in Vietnam and those veterans without Vietnam service</td>
<td>Early 1985</td>
</tr>
<tr>
<td>Vietnam Veteran Identical Twin Study</td>
<td>Veterans Administration</td>
<td>To compare mental and physical health status of identical twin veterans, one who served in Vietnam and one who did not</td>
<td>1987</td>
</tr>
<tr>
<td>Survey of Patient Treatment File</td>
<td>Veterans Administration</td>
<td>To identify morbidity patterns among Vietnam veterans from VA inpatient files</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Retrospective Study of Dioxins and Furans in Adipose Tissue</td>
<td>Veterans Administration</td>
<td>To devise a method for determining levels of dioxins and furans in adipose tissue of Vietnam-era veterans from samples in EPA’s Survey of Human Adipose Tissue, to identify Vietnam veterans among the tissue samples and to analyze samples</td>
<td>1985</td>
</tr>
<tr>
<td>Case-Control Study of Soft-Tissue Sarcoma</td>
<td>Veterans Administration &amp; Armed Forces Institute of Pathology</td>
<td>To determine whether Vietnam service, Agent Orange exposure and other factors increase the risk of soft-tissue sarcoma</td>
<td>1985</td>
</tr>
<tr>
<td>Epidemiological Study of Ground Troops Exposed to Agent Orange</td>
<td>Department of Health &amp; Human Services, Centers for Disease Control</td>
<td>To evaluate possible long-term health effects of Agent Orange exposure on ground troops in Vietnam and to assess possible health effects of Vietnam service; 30,000 veterans expected to participate</td>
<td>1988</td>
</tr>
<tr>
<td>Birth Defects and Military Service in Vietnam</td>
<td>Department of Health &amp; Human Services, Centers for Disease Control</td>
<td>To determine possible association between Vietnam service and subsequent fathering of congenitally malformed children; based on Birth Defects Registry in Atlanta area which includes families of approx. 5,400 case babies and 3,000 control babies</td>
<td>Early 1984</td>
</tr>
<tr>
<td>Soft-tissue Sarcoma Investigation</td>
<td>National Institute for Occupational Safety &amp; Health</td>
<td>To study tissues from seven cases of soft-tissue sarcoma in U.S. (4 who had been exposed to dioxin and 3 who may have been) in order to identify patterns of cancer that may be unique among those exposed to dioxin</td>
<td>Completed</td>
</tr>
<tr>
<td>Investigation of Leukemia in Madison County, Ky.</td>
<td>National Institute for Occupational Safety &amp; Health</td>
<td>To determine possible association between cases of leukemia and exposure to wood ammunition boxes treated with hexadioxins</td>
<td>Fall 1983</td>
</tr>
<tr>
<td>Dioxin Registry</td>
<td>National Institute for Occupational Safety &amp; Health</td>
<td>To analyze causes of death among workers at 12 production sites where dioxin-containing products were manufactured</td>
<td>1985</td>
</tr>
<tr>
<td>International Registry of Persons Exposed to Phenoxyl Acid Herbicides &amp; Contaminants</td>
<td>National Institute of Environmental Health Sciences, with International Agency for Research on Cancer</td>
<td>To establish an international registry of workers in some 20 plants where phenoxyl acid herbicides were manufactured; mortality study planned when enough workers have been added to registry</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Case-Control Study of Lymphoma and Soft-Tissue Sarcoma</td>
<td>National Cancer Institute</td>
<td>To compare herbicide exposure among cases of soft-tissue sarcoma and lymphoma with controls of the same age, sex and Kansas county of residence</td>
<td>1984</td>
</tr>
<tr>
<td>Air Force Health Study</td>
<td>Department of Defense</td>
<td>To compare mortality and morbidity of Air Force personnel involved in Agent Orange spraying in Vietnam with a group of Air Force personnel who were not exposed to the herbicide</td>
<td>Baseline Mortality 1983 Initial Morbidity Early 1984 Complete Followup 1999</td>
</tr>
<tr>
<td>AFIP Registry of Vietnam Veteran Biopsy Tissue</td>
<td>Armed Forces Institute of Pathology</td>
<td>To determine disease patterns in biopsy tissue from Vietnam veterans; 1,200 specimens thus far show no unusual patterns, especially of cancer</td>
<td>Indefinite</td>
</tr>
</tbody>
</table>

*Note: Dates listed are expected completion dates only. These dates may change as a result of unforeseen delays in locating individuals or collecting data, for example.*
Procedures for Filing Claims

Veterans who believe they have health problems that may be related to Agent Orange exposure should file a claim for disability compensation with the VA regional office. VA form 21-526 (JUL 1982), Veteran's Application for Compensation or Pension, is used for filing disability claims possibly related to Agent Orange exposure.

For information or assistance, veterans can call or visit a VA medical center, regional office or other VA facility. Check the telephone directory under U.S. Government, Veterans Administration. Toll-free telephone service is available in all 50 states.

Local representatives of various veterans' organizations and the Red Cross also have information and application forms available and will assist veterans in filing claims.

Agent Orange Information

Veterans or other interested individuals who would like to be added to VA's mailing list to receive the "Agent Orange Review" and other Agent Orange informational materials should send their name, complete address and social security number (if a veteran) to the VA Data Processing Center (200/392), 1615 E. Woodward St., Austin, TX 78772, Attn: Agent Orange Clerk.

A review and analysis of world literature on herbicides was conducted by an independent organization under contract with VA. Copies of the two-volume scientific document can be purchased from the U.S. Government Printing Office, Washington, DC 20401. The titles, order numbers and costs are: "Volume 1: Analysis of Literature," Stock No. 051-000-00154-1, $9.00 each; "Volume 2: Annotated Bibliography," Stock No. 051-000-00155-9, $9.50 each.

Administrator Pledges Action On Agent Orange Issue

In a special videotape distributed to all VA facilities, Administrator Harry Walters called on VA employees to deal sensitively and compassionately with veterans' concerns over Agent Orange and to ensure that veterans are aware of the services VA provides: participation in the Agent Orange Registry, medical care for problems that may be related to Agent Orange exposure and assistance in filing claims that could be linked to Agent Orange exposure.

Walters, who declared himself an advocate of America's veterans when he became administrator, has pledged to meet the special health-care needs of younger veterans, many who are combat-disabled and some who may have been exposed to phenoxy herbicides.

On the Agent Orange issue, Walters said: "The questions related to Agent Orange exposure are extremely complex. The difficulty in resolving them has frustrated Members of Congress, the veterans' service organizations, those of us in the Executive Branch and, most important, the veterans who are concerned as to how exposure may have affected their lives. These concerns are real, and VA must meet its responsibilities, whatever they may be."

At a VA Herbicide Advisory Committee meeting, Walters reaffirmed his belief that VA has a special responsibility in helping to resolve the complex issues surrounding exposure to Agent Orange. Walters stated that he intends to commit the necessary resources and to give top priority to supporting and reviewing research that will determine, to the extent possible, the likely effects of Agent Orange exposure, as well as the possible environmental hazards related to military service.