

# **AGENT ORANGE**

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**Information for Veterans Who Served in Vietnam**

## **GENERAL INFORMATION**



**Environmental Agents Service**  
**Department of Veterans Affairs**  
**810 Vermont Avenue, N.W.**  
**Washington, DC 20420**

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## **Agent Orange was used in Vietnam to protect U.S. troops.**

Agent Orange was a herbicide used in Vietnam to kill unwanted plants and to remove leaves from trees that otherwise provided cover for the enemy. The name, "Agent Orange," came from the orange stripe on the 55-gallon drums in which it was stored. Other herbicides, including Agent White and Agent Blue, were also used in Vietnam to a much lesser extent.

## **When and where Agent Orange was used in Vietnam.**

Between 1961 and 1971, the U.S. military in South Vietnam used more than 19 million gallons of herbicides for defoliation and crop destruction. Several types and combinations of chemicals were used. These mixtures were identified by the color of the stripe on the storage drums. The three most common mixtures were Agent Orange, Agent White, and Agent Blue. Fifteen different herbicides were shipped to and used in Vietnam. Most of the herbicides sprayed in Vietnam were Agent Orange, which was used between January 1965 and April 1970. Herbicides other than Agent Orange were used in Vietnam prior to 1965, but to a very limited extent. The total area sprayed with herbicides between 1962 and 1965 was quite small. However, some of the herbicides used in the early years contained greater concentrations of dioxin. Spraying occurred in all 4 military zones of Vietnam.

Heavily sprayed areas included inland forests near the demarcation zone; inland forests at the junction of the borders of Cambodia, Laos, and South Vietnam; inland forests north and northwest of Saigon; mangrove forests on the southernmost peninsula of Vietnam; and mangrove forests along major shipping channels southeast of Saigon.

## **Some Vietnam veterans are concerned about the long-term effects of exposure to Agent Orange.**

In the 1970's some veterans became concerned that exposure to Agent Orange caused health problems. One of the chemicals in Agent Orange contained minute traces of TCDD (dioxin), which caused a variety of illnesses in laboratory animals. More recent studies have suggested that the chemical may be related to a number of cancers and other health problems.

## **What concerned Vietnam veterans can do.**

In 1978, the Veterans Administration, now known as the Department of Veterans Affairs (VA), set up the Agent Orange Registry health examination program for Vietnam veterans concerned with the possible long-term medical effects of exposure to Agent Orange. Vietnam veterans who are interested in participating in this program should contact the nearest VA medical center for an examination. More than 315,000 Vietnam Veterans have completed this examination.

## **What a veteran can expect from this examination.**

Veterans who participate in this examination are asked about their possible exposure to herbicides in Vietnam. A medical history is taken, a physical examination is performed, and a series of basic laboratory tests, such as a chest x-ray (if appropriate), urinalysis, and blood tests, are done. If medically required, consultations with other health specialists are scheduled. However, no special Agent Orange tests are offered because there is no way to show that Agent Orange or other herbicides used during Vietnam caused individual medical problems. There are tests that show body dioxin levels, but VA does not perform them because there is serious question about their value to veterans. VA also makes a presumption of Agent Orange exposure for Vietnam veterans.

In its 1994 report on Agent Orange, the National Academy of Sciences (NAS) concluded that individual TCDD levels in Vietnam veterans usually are not meaningful because of background exposures to TCDD in all Americans, poorly understood variations among individuals in TCDD metabolism, relatively large measurement errors, and exposure to herbicides that did not contain TCDD.

### **How a veteran benefits from taking VA's Agent Orange Registry examination.**

The veteran is informed of the results of the examination during a personal interview and gets a follow-up letter further describing the findings. Each veteran is given the opportunity to ask for an explanation and advice. Sometimes a follow-up examination or additional laboratory tests are scheduled because of the possibility of previously undetected medical problems being present. These discoveries can help veterans get prompt treatment for their illnesses. Some veterans think they are in good health, but are worried that exposure to Agent Orange and other substances may have caused some hidden illnesses. The knowledge that a complete medical examination does not show any problems can be reassuring or helpful to Registry participants. All examination and test results are kept in the veteran's permanent medical record. These data are entered into the VA Agent Orange Registry.

### **Vietnam veterans can get medical treatment for Agent Orange-related illnesses.**

Under Section 102, Public Law 104-262, the Veterans' Health Care Eligibility Reform Act of 1996, VA shall furnish hospital care, medical services and may furnish nursing home care to veterans exposed to herbicides in Vietnam. These veterans will be furnished health care and without the requirement of a copayment. There are some restrictions. VA cannot provide such care for a (1) disability which VA determines did **not** result from exposure to Agent Orange, or (2) disease which the NAS has determined that there is "limited/suggestive" evidence of **no** association between occurrence of the disease and exposure to a herbicide agent.

### **Some Vietnam veterans get disability compensation for Agent Orange-related illnesses.**

VA pays disability compensation to Vietnam veterans with injuries or illnesses incurred in or aggravated by their military service. Veterans do not have to prove that Agent Orange caused their medical problems to be eligible for compensation. Rather, VA must determine that the disability is "service-connected." A Veterans Services Representative, at a VA medical center or regional office, can explain the compensation program in greater detail and assist veterans who need help in applying. For more information about the VA's Agent Orange program call the toll-free helpline: 1-800-749-8387; for disability compensation program information, call toll-free: 1-800-827-1000.

### **VA has recognized a number of conditions for "service-connection" based on evidence of an association with Agent Orange (or other herbicides used in Vietnam).**

The number of diseases that VA has recognized as associated with (but not necessarily caused by) Agent Orange exposure has expanded considerably during the 1990's. The following conditions are recognized for service-connection for these veterans: chloracne (a skin disorder), porphyria cutanea tarda, acute or subacute peripheral neuropathy (a nerve disorder), type 2 diabetes, and numerous cancers [non-Hodgkin's lymphoma, soft tissue sarcoma, Hodgkin's disease, multiple myeloma, prostate cancer, and respiratory cancers (including cancers of the lung, larynx, trachea, and bronchus)]. VA is in the process of adding chronic lymphocytic leukemia to this list. In addition, Vietnam veterans' children with the birth defect spina bifida are eligible

for certain benefits and services. Furthermore, VA now provides certain benefits, including health care, for children with birth defects who were born to female Vietnam veterans.

**Other VA efforts are underway to help Vietnam veterans who were exposed to Agent Orange.**

In addition to the efforts described above (that is, Agent Orange Registry examination program, medical treatment, and disability compensation), VA is doing research to learn more about the possible adverse health effects of military service in Vietnam. The Environmental Epidemiology Service (EES) is the premiere office for Vietnam/Agent Orange-related research within VA. EES investigators have completed numerous studies on this subject; summaries are available at our website: [www.va.gov/agentorange/](http://www.va.gov/agentorange/).

**What other government departments and agencies are doing.**

Many other Federal departments and agencies have pursued and/or are conducting scientific studies on this subject. The Centers for Disease Control and Prevention (CDC), Air Force (USAF), National Institute for Occupational Safety and Health (NIOSH), National Cancer Institute (NCI), and Environmental Protection Agency (EPA) have all been involved in research.

In 1984, the CDC published an important study, partially funded by VA, regarding Vietnam veterans' risks of fathering babies with birth defects. VA also funded the CDC Vietnam Experience Study published in 1987 and 1988, and the CDC Selected Cancers Study published in 1990. For additional information about the CDC effort, see [www.cdc.gov/mmwr/mmwrpv1.html](http://www.cdc.gov/mmwr/mmwrpv1.html) for August 17, 1984, February 13, and July 24, 1987, and May 27, 1988. The USAF is conducting a long-term study of illnesses and death among the men involved in the herbicide spraying missions. Air Force researchers have issued numerous reports regarding their findings in this ongoing project.

Several states have undertaken research efforts to learn more about the possible health effects of Agent Orange and the Vietnam experience upon our Nation's veterans.

**The National Academy of Sciences' Institute of Medicine has a major role in this issue.**

Under Public Law 102-4, the Agent Orange Act of 1991, the Institute of Medicine (IOM) of National Academy of Sciences, a non-governmental organization, has reviewed and continues to evaluate all relevant scientific literature and to provide advice to the Secretary of Veterans Affairs on health effects of herbicides exposure. The IOM project is being undertaken in accordance with Public Law 102-4. The IOM reported its initial findings in July 1993. Updates were released in March 1996, February 1999, April 2001, and January 2003. A special report on type 2 diabetes was released in October 2000. A special report on acute myelogenous leukemia in the children of Vietnam veterans was issued in February 2002. Future reports are anticipated approximately every two years. The IOM and its subcontractor also developed a historical herbicide exposure reconstruction model that could be used in Agent Orange-related research efforts. For additional information and a complete version of the IOM reports, see [www.nap.edu](http://www.nap.edu).

The IOM recently concluded that with the current technology, a health study of Vietnam veterans is feasible. However, VA now makes the presumption of exposure to Agent Orange for Vietnam veterans. This means that a Vietnam veteran is not required to prove exposure to herbicides in Vietnam. Some researchers are interested in producing better information to accurately estimate the exposure of individual veterans.

**Certain Vietnam-era veterans who served in Korea also can get the Agent Orange Registry examination. So can certain other veterans who were exposed to herbicides elsewhere.**

In September 2000, VA recognized that Agent Orange was used in Korea in the late 1960's and approved Agent Orange examinations for U.S. veterans who served in Korea in 1968 or 1969. VA took this action despite reports that Republic of Korea troops, not U.S. military personnel, did the actual spraying.

In March 2001, Secretary Principi ordered that those examinations be made available to all other veterans who may have been exposed to dioxin or other toxic substances in a herbicide or defoliant during the conduct of or as the result of testing, transporting, or spraying of herbicides for military purposes.

**Additional information is available.**

There is at each VA medical center an "Environmental Health Clinician" responsible for the conduct of Agent Orange Registry exams. These health care providers participate in national conference calls conducted by the Environmental Agents Service (EAS), and receive frequent mailings from VA headquarters updating them on the latest developments on Agent Orange issues. Each facility also has an "Environmental Health Coordinator" to facilitate the Agent Orange program.

The *Agent Orange Review* newsletter, prepared by the VA Environmental Agents Service, provides updated information on Federal government studies and activities related to Agent Orange and the Vietnam experience. Registry participants are automatically added to the mailing list; others can contact the EAS at the address below.

The *Agent Orange Brief* fact sheets, prepared and updated by the VA Environmental Agents Service (EAS), are available from EAS and at VA medical centers. The following Agent Orange Briefs are now available:

**General:**

- A1. General Information
- A2. Class Action Lawsuit

**VA Programs (Except Research):**

- B1. Agent Orange Registry
- B2. Health Care Eligibility
- B3. Disability Compensation
- B4. Information Resources

**Research:**

- C1. The Problem Encountered in Research
- C2. Agent Orange/Vietnam Related Research-VA Efforts
- C3. Agent Orange/Vietnam Related Research-Non-VA Efforts

**Medical Conditions:**

- D1. Birth Defects
- D2. Chloracne
- D3. Non-Hodgkin's Lymphoma
- D4. Soft Tissue Sarcomas
- D5. Peripheral Neuropathy
- D6. Hodgkin's Disease
- D7. Porphyria Cutanea Tarda
- D8. Multiple Myeloma
- D9. Respiratory Cancers
- D10. Prostate Cancer
- D11. Spina Bifida
- D12. Diabetes
- D13. Chronic Lymphocytic Leukemia

Copies of the newsletters, fact sheets, and additional information is available online at [www.va.gov/agentorange](http://www.va.gov/agentorange). Vietnam veterans and their families are also encouraged to call the Gulf War/Agent Orange Helpline. The toll-free telephone number for the Helpline is 1-800-749-8387.

Contact the EAS (131), Department of Veterans Affairs, 810 Vermont Ave., N.W., Washington, DC 20420, for additional information on Agent Orange.

Veterans service organizations and State government entities (including Agent Orange Commissions, Departments or Divisions of Veterans Affairs, Departments of Health) also help individuals seeking information on this subject.

The initial and follow-up IOM reports are available on-line at [www.nap.edu](http://www.nap.edu) or for purchase from the National Academy Press, 2101 Constitution Avenue, N.W., Lockbox 285, Washington, DC 20055. The telephone numbers are 1-800-624-6242 and 202-334-3313. Copies of these books were sent to all VA medical center libraries.

**Toll-Free Telephone Gulf War/ Agent Orange Helpline**

\*\*\* 1-800-749-8387 \*\*\*

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