Air Force Releases Phase II Of Ranch Hand Study

The Air Force released the first morbidity report (diseases, including birth defects in offspring) of its Ranch Hand Study on February 24, 1984.

The study is an epidemiological investigation of the possible adverse health effects of herbicide exposure of Air Force personnel who were involved in herbicide spraying missions in Vietnam (Operation Ranch Hand).

The study did not identify statistical differences between the Ranch Hand group and the comparison group for illnesses commonly attributed to dioxin exposure. In addition, the study does not support, at this time, a cause-and-effect relationship between herbicide exposure and adverse health in the Ranch Hand group. Both the Ranch Hand group and the comparison group were found to be in good health for their ages.

Data from the Ranch Hand group (1,045) and the original comparison group (773) who completed the physical examinations were the primary focus of the report. Most of the data were obtained from interviews and physical examinations of the Ranch Hand group and the comparison group.

The study assessed general physical health; malignancies; and fertility/reproductive, neurological, psychological, hepatic (liver), immunologic, dermatologic, cardiovascular, hematologic, pulmonary, renal and endocrine systems.

Analysis of the data showed numerous medical findings, most of a minor or undetermined nature that will require detailed followup. Some of the findings are listed below.

CANCER

- no statistical differences between the Ranch Hand group and the comparison group for malignant or benign systemic tumors;
- no cases of soft-tissue sarcoma among the Ranch Handers and one in the comparison group;
- no cases of digestive cancers in the Ranch Hand group;
- significantly more nonmelanotic skin cancer in the Ranch Hand group; however, no adjustments have been made for sunlight exposure which is the major cause of these cancers;
- no uncommon cancers or cancers in unusual sites or at an unusual age among Ranch Handers.

DERMATOLOGY

- no cases of chloracne in either group. 

(See Ranch Hand, page 4)

Compromise Agent Orange Bill Passes House of Representatives

On January 30, 1984, the House of Representatives passed H.R. 1961, the Agent Orange and Atomic Veterans Relief Act. The bill would provide a disability or death allowance for Vietnam veterans with certain health problems that might be linked to Agent Orange or radiation exposure.

Reported in the August '83 "Agent Orange Review" as the Vietnam Veterans Agent Orange Relief Act, the bill was later amended to include the allowance for veterans who participated in atomic weapons testing or in the post-World War II occupation of Hiroshima and Nagasaki.

(See AO Bill, page 2)
VA's Herbicide Advisory Committee Holds 19th Quarterly Meeting

VA's Advisory Committee on Health-Related Effects of Herbicides met in Washington, D.C., on March 6, 1984.

The full committee heard reports on a number of Agent Orange-related activities, including VA and Australian government projects, the morbidity portion of the Air Force (Ranch Hand) Health Study, and the epidemiology study and birth defects study being conducted by the Centers for Disease Control.

The Subcommittee on Veterans' Education and Information heard reports on plans for Agent Orange videotapes and other informational efforts. In response to one of the subcommittee's recommendations, the order of production of the videotapes has been changed to provide first for a film directed to intake personnel at VA medical centers and regional offices. The subcommittee will review all scripts prior to production.

Reports on VA's review of soft-tissue sarcoma cases in VA hospital records, the Michigan soft-tissue sarcoma study, and more detailed information on CDC's epidemiological study and the Australian government's morbidity study were presented to the Subcommittee on Epidemiology and Biostatistics.

The committee is made up of from 12 to 16 members. Membership includes scientists from within and outside the government and individuals from veterans' groups. Current members are:

Barclay M. Shepard, M.D., Chairman
VA's Agent Orange Projects Office

George R. Anderson, M.D.
Occupational Medicine and Toxicology
Texas Department of Health

Donald Barnes, M.D.
Senior Science Advisor
Office of the Assistant Administrator for Pesticides and Toxic Substances
Environmental Protection Agency

Irving B. Brick, M.D.
Senior Medical Consultant
National Veterans Affairs and Rehabilitation Commission
The American Legion

George T. Estry
Appeals Consultant
Veterans of Foreign Wars

Jon R. Furst
National Chairman
National Veterans Task Force on Agent Orange

Richard A. Hodder, M.D., M.P.H.
Col., Medical Corps, U.S. Army
Deputy Director, Division of Medicine
Walter Reed Army Institute of Research

Carolyn H. Lingeman, M.D.
National Toxicology Program
National Institutes of Health

Marion Moses, M.D.
National Farm Workers Health Group

Joseph Mulinare, M.D.
Chronic Disease Division
Centers for Disease Control

Herbicide Literature Review Update Nears Completion

An updated review and analysis of world literature on the health effects of phenoxy herbicides has been completed by an independent organization under contract with VA.

The scope of the updated review covers published literature available since the original report was completed in October 1981. The literature deals with health effects of exposure to phenoxy herbicides and impurities, cacodylic acid (Agent Blue) and picloram.

Included in the bibliography are documents covering studies of animals exposed to these substances. Also included are human studies that deal with occupational exposure, environmental exposure and Vietnam veterans.

The literature review update is expected to be available in late spring of this year. Order information will be included in the next issue of the "Agent Orange Review."

VA's Advisory Committee on Health-Related Effects of Herbicides has recommended that a lay-language summary of the literature review be published. VA has plans to prepare and publish a summary at some future date.
The Agent Orange Registry was initiated by VA in mid-1978 in response to Vietnam veterans' concerns that they may have been exposed to herbicides which might be causing a variety of ill effects. A VA circular, dated September 14, 1978, established the framework of the Registry.

A special Data Analysis Task Force was formed in June 1980 when it became obvious that the Registry's data input procedures needed improvement. The Task Force recommended a number of changes during 1981 and, in August 1982, another VA circular directed an updating of the names and addresses for the veterans listed in the Registry. This circular was followed by a March 1, 1983, circular that completely revised the reporting process in order to improve the coding of personal and medical information, thereby permitting easier retrieval of data.

Registry records consist of two components: the medical record maintained at the VA medical center where the veteran was examined and a computerized extract from that record. The veteran's medical record includes the full medical history, physical examination, laboratory reports and other clinical findings. The computerized extract, better called the "register," includes the veteran's name, address, the examining center, some information about the veteran's military service, an estimate of herbicide exposure and elements of the findings at the time of the physical examination. The computerized register constitutes an index to this nationwide set of medical records.

### Purpose of Registry

The principle purpose for which the Agent Orange Registry program was designed remains unchanged. It is a process that serves all veterans who are worried about the possible adverse health effects of their exposure to herbicides while serving in Vietnam. It provides the veteran an opportunity to receive a complete health evaluation and answers to his or her questions concerning the current state of knowledge regarding the relationship between herbicide exposure and subsequent health problems. Following completion of the examination, the veteran is given the results of the physical exam and laboratory studies. This information is provided to the veteran in a face-to-face discussion with a physician familiar with the health aspects of the Agent Orange issue and through a followup letter summarizing the results of the examination.

The Registry serves an important second purpose in that it enables VA to provide veterans current information as it develops regarding their concerns. In addition, it would permit VA to contact veterans for further testing in the event that continuing research efforts should make this action advisable.

The Registry serves yet another purpose, namely, to provide a means of detecting clues or suggestions of specific health problems in the event that unexpected or unusual trends show up in this group of veterans. Such clues could then form the basis for the design and conduct of specific epidemiological studies.

Because of the self-selected nature of the Registry participants, this group of veterans cannot, with any scientific validity, be viewed as being representational of Vietnam veterans as a whole. The health-related information contained in the data base, therefore, cannot be used as the basis for a controlled scientific study. The information can, however, be used to detect suggested health trends, as noted above, and can provide some indications as to the characteristics of the group itself. For example, it is possible to show the numbers in each branch of military service, the period(s) of service in Vietnam, the kinds of symptoms the veterans are experiencing and some of the results of the physical examinations. From this type of information, it is possible to develop the relative frequency of certain health factors. However, since participation in the Registry program is entirely voluntary, statistically valid comparisons cannot be made directly between this group of veterans and other groups of veterans or nonveterans.

### Participation in the Registry

The Agent Orange Registry remains VA's most effective means of identifying concerned Vietnam veterans. Any eligible Vietnam veteran expressing a concern relating to exposure to herbicides is encouraged to participate in the Registry program. The veteran is asked personal and identifying information; military information, including branch of service and dates of service in Vietnam; and the circumstances of exposure to Agent Orange. In addition, past medical history is obtained and documented. The veteran is then provided a complete physical examination and several base-line laboratory studies. Appropriate additional tests and consultations are obtained when medically indicated by the veteran's physical condition or past medical history. (See the November '83 "Agent Orange Review" for a more detailed description of the registry examination.)

As of December 31, 1983, VA had completed 130,220 initial Agent Orange Registry examinations. The new code sheet was used for approximately 13,600. In addition, 31,471 followup examinations have been performed. (See graph on p. 3 for fiscal year '80 through '83 totals.)

### Agent Orange Examinations

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<thead>
<tr>
<th>Year</th>
<th>Number of Examinations</th>
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<tr>
<td>FY '80</td>
<td>33,156</td>
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<tr>
<td>FY '81</td>
<td>34,272</td>
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<tr>
<td>FY '82</td>
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<tr>
<td>FY '83</td>
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</tbody>
</table>

Cumulative total number of initial examinations as of December 31, 1983: 130,220

*Includes totals for FY '78 and FY '79.

*Because of changes in examination reporting procedures, actual totals prior to 5/81 are unavailable. Estimated figures have been used.
FERTILITY/REPRODUCTIVE

Because these results are based largely on self-reports and must be verified by reviews of complete medical records and birth certificates, the findings are preliminary until verification is completed.

- no significant differences in fertility, infertility, miscarriages, still births or live births;
- minor birth abnormalities (rashes, birth marks) among Ranch Hand offspring;
- a greater number of neonatal deaths (age 1 through 28 days) and physical handicaps among Ranch Hand offspring.

OTHER

- no significant differences in immunology, hematology, renal, pulmonary or endocrine areas.

Further physical examinations and questionnaires will be administered at 3 (1985), 5, 10, 15 and 20 year points.

The mortality portion of the Air Force Health Study, released last year, showed no statistical differences in the death rates between the Ranch Hand and the comparison group.

AO Bill, from page 1

The compromise bill was approved by voice vote.

The bill would provide a disability or death allowance for Vietnam veterans who suffer from one of the following:

- soft-tissue sarcoma, if occurring within 20 years of the veteran's departure from Southeast Asia;
- porphyria cutanea tarda (a condition that affects the liver and skin), if occurring within one year of the veteran's date of departure from Southeast Asia; and
- chloracne, if occurring within one year of the veteran's date of departure from Southeast Asia.

A "sunset" clause would require that the provisions of the bill expire one year after the first report on the Centers for Disease Control's epidemiological study is submitted.

A disability allowance also would be payable for leukemia, polycythemia vera (a chronic bone marrow disease) or thyroid cancer suffered by veterans within 20 years of the date of their participation in either atomic weapons testing or in the post-World War II occupation of Hiroshima and Nagasaki.

Hearings on H.R. 1961 were held in April and July of last year before the House Veterans' Affairs Committee's Subcommittee on Compensation, Pension and Insurance.

The House-passed measure is currently awaiting Senate action.