## VETERANS ADMINISTRATION ADVISORY COMMITTEE ON HEALTH-RELATED EFFECTS OF HERBICIDES

Veterans Administration Central Office
Room 119
810 Vermont Avenue, N.W.
Washington, D.C. 20420

February 24, 1983

#### RETROSPECTIVE STUDY OF DIOXINS AND FURANS IN ADIPOSE TISSUE

In a limited study conducted in 1979-1980, the Veterans Administration (VA) found that 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) could be detected and quantified in adipose tissue removed from Vietnam-era veterans. Although there was no clear relationship between levels of 2,3,7,8-TCDD and either Vietnam service, exposure to Agent Orange, or current health status, the study indicated the need for further investigation. The VA, in cooperation with the Environmental Protection Agency (EPA) has established an interagency agreement to study levels of 2,3,7,8-TCDD in adipose tissue from a selected group of U.S. males.

Since 1970, the Environmental Protection Agency has been annually collecting adipose tissue for its National Human Adipose Tissue Survey. Adipose Tissue is collected from a statistically representative segment of the general population and analyzed for residues of selected organochlorine pesticide-related chemicals and polychlorinated biphenyls (PCBs). Approximately 12,000 specimens have been collected and analyzed, and of these approximately 4,000 have excess tissue left over from the original analysis which can be used for further chemical analyses. These excess tissues are stored in a tissue bank at EPA's Toxicant Analysis Center, Bay St. Louis, Mississippi. Represented within this bank is adipose tissue from 555 males born between 1937 and 1952. Many of these individuals will have served in the military during the Vietnam-era and some will have served in Vietnam during the period of Agent Orange use. A retrospective study of selected chlorinated dioxins and furans (chemicals similar in structure to the dioxins) may establish data on background levels of 2,3,7,8-TCDD in the U.S. male population as well as whether service in the military and especially in Vietnam has had an effect on the levels of TCDD in adipose tissue.

The study will be conducted in three phases. Phase I will be to obtain the name and social security number for the approximately 555 males noted above. This information will be used to determine military service status. Phase II will be the development of analytic methods for the determination of selected dioxins (especially the 2,3,7,8-TCDD) and furans in human adipose tissue. The method will be subjected to rigorous interlaboratory validation by an independent Analytic referee, e.g., the Association of Official Analytical Chemists. Phase III will be the analysis of the adipose tissue and the preparation of a final report. Phase I and II should be completed within calendar year 1983, and the report from Phase III should be available in early 1985.

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#### VA ENVIRONMENTAL MEDICINE MONOGRAPH SERIES

The VA Environmental Medicine Monograph Series is designed to provide useful scientific information on environmental and occupational factors that have or may have impacted the health of military personnel serving in Vietnam. The monographs will be authored by internationally recognized experts and will be a source of invaluable scientific information on selected topics to VA Environmental Physicians, researchers and other members of the scientific community.

#### Monographs for FY-83

Monograph	Name and Address
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Agent Blue (Cacodylic Acid) Ronald D. Hood, Ph.D.

Professor of Biology Biology Department University of Alabama Tuscaloosa, AL 35488

Human Exposure to Phenoxy Herbicides Terry L. Lavy, Ph.D.

> Professor of Agronomy Division of Agriculture University of Arkansas Althemier Laboratory Route 11, Box 82

Fayetteville, AR 72701

Birth Defects, Genetic Annemarie Sommer, M.D.

Associate Professor of Pediatrics

College of Medicine Ohio State University Children's Hospital 700 Children's Drive Columbus, OH 43205

Senior Editor - Donald L. Birmingham, M.D.

Clinical Professor of Dermatology

Wayne State Health Center

Detroit, MI 48201

Screening and Counseling

Chlorache

# CSP Number 256 (VETS) Tenative Budget FY \*83-FY \*85

Item	FY '83	FY '84	FY '85
Core Staff at St. Louis			
7 FTE	200,000+	255,000	255,000
00C	21,000+	25,000	25,000
Interactive Equipment	·		
for Data Collection	75,000	-0-	-0-
Hines CSPCC			
3 FTE	15,000	80,000	80,000
COC (Forms)	5,000	20,000	10,000
Computer Time	5,000	20,000	20,000
NAS Contract			
Pilot Study	25,000	<del>-</del> 0-	-0-
Twin Register	500,000- 1,500,000*	-0-	-0

<sup>\*</sup> Exact figure should be known by June 1, 1983. + Already sent to St. Louis: 200,000 pers., 21,000 CCC, 3,000 Travel

### CSP Number 256 (VETS) Tenative Budget FY '83-FY '85 Continued

Item	FY '83	FY '84	FY '85
Life History Development and Pretest	25,000	-0-	-0-
Recruitment of Sample (2,000 personal interviews at \$500)	-0-	500,000	500,000
Physical Assessment (1,000 exams at \$5,000)	-0-	2,500,000	2,500,000?
Travel (Includes EC and OC)	25,000+	20,000	20,000
Total Excluding Travel	871,000- 1,871,000*	3,400,000	3,465,000
Grand Total	896,000- 1,896,000*+	3,425,000	3,485,000

<sup>\*</sup> Exact figure should be known by June 1, 1983. + Already sent to St. Louis: 200,000 pers., 21,000 CCC, 3,000 Travel

# HUMAN AND ENVIRONMENTAL RISKS OF THE CHLORINATED DIOXINS AND RELATED COMPOUNDS

Editors: Richard E. Tucker

Alvin L. Young Allan P. Gray

The book is a compilation of the 53 originial manuscripts and the Blue Ribbon Panel Reports of the 2nd International Symposium on Chlorinated Dioxins and Related Compounds held October 25-29, 1981 in Arlington, Virginia.

The book will be available on March 8, 1983 and may be obtained from:

Plenum Publishing Corporation 233 Spring Street New York, New York 10013

Price: \$95.00