

Testimony of

David F. Carter, Chairman
Michael N. Sovick, Research Director

THE OKLAHOMA AGENT ORANGE FOUNDATION

Member of the National Association
of State Agent Orange Programs

before the

UNITED STATES HOUSE
COMMITTEE ON VETERANS' AFFAIRS

The Honorable G.V. (Sonny) Montgomery, Chairman

Wednesday, June 8, 1988

MEMBER OF THE NATIONAL ASSOCIATION OF STATE AGENT ORANGE PROGRAMS

THE OKLAHOMA AGENT ORANGE FOUNDATION

P.O. Box 849
Lexington, OK 73051
June 8, 1988

The Honorable G.V. (Sonny) Montgomery
335 Cannon House Office Building
Washington, D.C. 20515-6335

RE: Written testimony for the Permanent Record of the House
Veterans' Affairs Committee Hearing on Agent Orange.

Dear Chairman Montgomery,

This letter will introduce the following testimony:

1. Opening remarks: (One page, 1)
2. A Review of all the Mortality and Morbidity Studies of Vietnam Veterans: (Six pages, 2-7)
3. A List of Cancers Found in Excess in Vietnam Veterans: (One page, 8)
4. A Chart Showing the Excess Cancers in those Counties where Agent Orange was manufactured: (One page, 9)
5. A Chart with References Showing Immune System Damage in Vietnam Veterans and other groups exposed to Dioxin: (Three pages, 10-12)
6. A Chart with References Showing Excess Birth Defects in Vietnam Veterans and in those Counties where Agent Orange was manufactured: (Four pages, 13-16)
7. A Critique of the CDC Study of Serum Dioxin Levels of Vietnam Veterans: (Two pages, 17-18)
8. A Critique of the CDC Vietnam Experience Studies, the Mortality Results and the Health Status of Vietnam Veterans, II. Physical Health: (Two pages, 19-20)

We respectfully submit these items for the Permanent Record of the House Veterans' Affairs Committee Hearing on Agent Orange, scheduled to be held on June 8, 1988.

Sincerely,



David F. Carter, Chairman
and Michael N. Sovick,
Research Director



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VIETNAM VETERANS DESERVE COMPENSATION, NOT MORE STUDIES

The Second Body Count of Dead Vietnam Veterans

Enclosed within this testimony are the summarized results from all of the Mortality and Morbidity studies that have been done on Vietnam Veterans. This compilation of results represents a data base of 765,664 men, nearly twenty-five percent (25%) of the total, with in-country service. Of these men, 39,989 have died since returning home. Thousands have died from latent diseases and disorders associated with exposure to toxic chemicals, including Agent Orange, in Vietnam.

Most of these studies have been completed since 1982, when the Reagan administration signaled a change in its cancer regulations, by stating it would "rely less on laboratory tests on animals and WAIT INSTEAD FOR EPIDEMIOLOGICAL STUDIES OF SICKNESS AND DEATH IN HUMAN POPULATIONS". Also in 1982 the Reagan administration REVISED the Veterans Administration (VA) literature, made available during the Carter administration to Vietnam Veterans inquiring about the human health effects of Agent Orange, by REMOVING ALL REFERENCES TO CANCER!

IS IT POSSIBLE THAT THOUSANDS OF VIETNAM VETERANS MAY HAVE DIED NEEDLESSLY BECAUSE THEY DID NOT RECEIVE THE NECESSARY INFORMATION ABOUT EARLY DETECTION FOR CANCER AND OTHER LIFE THREATENING DISORDERS?

Unfortunately, these revised cancer regulations may also have resulted in thousands of needless civilian deaths. For this reason, we have included summaries of studies done on civilians who were exposed to Agent Orange and its dioxin contaminant during the manufacturing process. (Other civilian health warnings were removed in 1982 by the EPA after the DOW Chemical Company was allowed to edit EPA documents.) After comparing these civilian studies with the studies done on Vietnam Veterans, we found that those civilians exposed to the same toxic chemicals as the Veterans have experienced similar excesses of death, birth defects, and illness of the same types of diseases and disorders.

VIETNAM VETERANS WERE EXPOSED TO HIGHLY CONTAMINATED TOXIC CHEMICALS, PERHAPS AS MUCH AS 47,000 TIMES AS TOXIC AS THE "CIVILIAN" VERSIONS. THUS, VIETNAM VETERANS MAY BE A "BAROMETER" FOR THE POPULATION AS A WHOLE, MUCH LIKE THE CANARIES THAT MINERS USED TO USE TO GIVE THEM AN EARLY WARNING ABOUT TOXIC GAS. PLEASE REVIEW THE SUMMARIES ABOUT THE CANARIES, VIETNAM VETERANS.

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VIETNAM VETERANS DESERVE COMPENSATION, NOT MORE STUDIES

THE LATENT DISEASES AND DISORDERS OF THE LYMPHORETICULAR SYSTEM FOUND IN EXCESS: A REVIEW OF ALL OF THE MORTALITY AND MORBIDITY STUDIES OF VIETNAM VETERANS EXPOSED TO THE PHENOXY ACID HERBICIDES (AGENT ORANGE) AND DIOXIN (TCDD)

A. WHEN THE HUMAN BODY TRIES TO ELIMINATE TOXIC CHEMICALS, IMMUNE CELLS WITHIN THE LYMPHORETICULAR SYSTEM ARE INVOLVED IN THE DETOXIFICATION (OR ATTEMPTED DETOXIFICATION) & ELIMINATION PROCESS. THUS, THIS SYSTEM IS A POTENTIAL SITE OF DAMAGE AND SUBSEQUENTLY MAY BE THE SITE OF VARIOUS DISEASES AND DISORDERS. THE FOLLOWING LIST IS THE EVIDENCE OF EXCESS MORTALITY & MORBIDITY FROM DISEASES OF THE LYMPHORETICULAR SYSTEM IN VIETNAM VETS. (Numbered references, see page 6; abbreviation codes, see page 7)

THE LYMPHORETICULAR SYSTEM INCLUDES THE FOLLOWING:

- 1. LYMPHATIC - lymph nodes, lymph vessels, etc.
- 2. VASCULAR - heart, all blood vessels
- 3. RESPIRATORY -- nasal cavities, pharynx, mouth, larynx, bronchi, lungs, etc.
- 4. GASTROINTESTINAL - stomach, both intestines
- 5. GENITOURINARY - kidney, bladder, genitals, etc.

THE FOLLOWING IS THE EVIDENCE OF EXCESS LYMPHORETICULAR DEATH AND DISEASE EXPERIENCED BY VIETNAM VETERANS:

- 1. LYMPHATIC: CANCER - non-Hodgkin's lymphoma (NHL)
 - a. VV 1983 VA Agent Orange Registry [25] SSX
 - b. VV 1985 NY Mortality Study [12] MORX
 - c. VV 1986 W. VA Mortality Study [10] SSX
 - d. VV 1987 CDC VES - Postservice Mortality[7] XRR
 - e. VV 1987 Ranch Hand II - Followup [5] X
 - f. VV 1987 VA Mortality Study [27] SSX

2. VASCULAR: DISEASE - heart, blood vessels
- a. VV 1983 Mass. Mortality Study [13] SSX
(cerebrovascular disease)
 - b. VV 1984 Ranch Hand II - Baseline [17] SSX
(abnormal peripheral pulses)
 - c. VV 1985 NY Mortality Study [12] SSX
(stroke & cardiovascular disease)
 - d. VV 1987 CDC VES - Postservice Mortality[7] SSX
(heart & cerebrovascular disease)
 - e. VV 1987 Ranch Hand II - Followup [5] SSX
(cardiovascular disease)
 - f. VV 1988 Ranch Hand II - Interim Report [3] SSX
(cardiovascular disease)
 - g. VV 1988 CDC VES Physical Health [1] SSX
(hypertension)
3. RESPIRATORY -- nasal cavities, pharynx, mouth, larynx,
bronchi, lungs
- a. CANCER
- (1). VV 1983 VA Agent Orange Registry [25] SSX
(pharynx and buccal cavities)
 - (2). VV 1984 Ranch Hand II - Baseline [17] SSX
(lip, oral cavity [buccal]) X
(pharynx, and respiratory)
 - (3). VV 1985 NY Mortality Study [12] SSX
(lung cancer)
 - (4). VV 1986 W. VA Mortality Study [10] SSX
(larynx and respiratory)
 - (5). VV 1987 VA Mortality Study [27] SSX
(lung cancer)
 - (6). VV 1987 Ranch Hand II - Followup [5] X
(oral cavity, pharynx, lung,
and bronchus)
- b. DISEASE
- (1). VV 1985 Wisconsin Mortality Study[11] SSX
(pneumonia)
 - (2). VV 1987 Ranch Hand II - Followup [5] SSX
(TB, pleurisy, and rales)
- c. FUNCTION
- (1). VV 1984 Ranch Hand II - Baseline [17] SSX
(abnormal pulmonary function)

4. GASTROINTESTINAL: DIGESTIVE DISEASE - stomach, intestines

- a. OC 1983 Dow Occupational Study [26] SSX
(digestive system morbidity)
- b. VV 1983 Correlates of A.O. Exposure [18] SSX
(digestive problems - morbidity)
- c. VV 1984 Australian VV Mortality Study [14] XRR
- d. VV 1985 NY Mortality Study [12] MORX
- e. VV 1987 Ranch Hand II: Followup [5] X MORTALITY
- f. VV 1988 Disease Among Marines [2] SSX
(digestive system morbidity)
- g. VV 1988 CDC VES Physical Health [1] SSX
(gastrointestinal tract ailments)

5. GENITOURINARY - kidneys, bladder, genitals, etc.

a. CANCER

- (1) VV 1983 Mass. Mortality Study [13] SSX
(kidney cancer)
- (2) VV 1984 Ranch Hand II - Baseline [17] X
(kidney, bladder, & testicular)
- (3) VV 1985 NY Mortality Study [12] MORX
- (4) VV 1986 W. VA Mortality Study [10] SSX
(testicular)
- (5) VV 1987 Ranch Hand II - Followup [5] X
(kidney, bladder, & testicular)

b. DISEASE

- (1) VV 1985 Wisconsin Mortality Study [11] SSX
- (2) VV 1987 CDC VES - Mortality [6] SSX
- (3) VV 1988 Disease Among Marines [2] SSX

B. "Ranch Hand II: Baseline Morbidity Study Results" Lathrop et al., USAF, 24 Feb 1984, page XVII-13.

"There were 113 diseases reported by history in the Ranch Hands, but only 57 in the comparisons [mean number of conditions of 0.11 per person and 0.07 per person (p=0.02), respectively]."

A P-VALUE OF 0.02 INDICATES THAT A SIGNIFICANT AMOUNT OF EVIDENCE EXISTS THAT THE OBSERVED DIFFERENCE IN THE HEALTH STATUS BETWEEN THE TWO GROUPS IS REAL!

C. THE ADVERSE PSYCHOLOGICAL CONSEQUENCES OF DIOXIN: INCLUDING THE MORTALITY & MORBIDITY STUDIES DONE ON VIETNAM VETS.

Reference # year and type	Externally caused deaths	Mental disorders	Suicides
1) 1988 VV		SSX	
2) 1988 VV		SSX	
3) 1988 VV		SSX	
4) 1987 OC			SSX
5) 1987 VV		SSX	
6) 1987 VV	SSX		
7) 1987 VV	X	SSX	SSX
8) 1986 EN		SSX	
9) 1986 VV	SSX		SSX
10) 1986 VV	SSX		
11) 1985 VV	SSX	PMRX	SSX
12) 1985 VV	SSX	SSX	SSX
13) 1985 VV	SSX		SSX
14) 1984 VV	SSX		SSX
15) 1984 VV		SSX	
16) 1984 VV		SSX	
17) 1984 VV		SSX	
18) 1983 VV		SSX	
19) 1981 OC		X	
20) 1980 OC	X		X
21) 1977 OC	X		X
22) 1976 VV		SSX	
23) 1971 OC		SSX	
24) 1961 OC		X	

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- 3) Albanese, R.A., USAF Personnel and Exposure to Herbicide Orange, USAFSAM-TR-88-3, USAF School of Aerospace Medicine, Brooks Air Force Base, TX, February 1988.
- 4) Green, L.M., Suicide & Exposure to Phenoxy Acid Herbicides, Scandinavian J. Work Environ Health, 13:460, 1987.
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- 11) Anderson et al., Wisconsin Vietnam Veteran Mortality Study: Proportionate Mortality Ratio Results, Wisconsin Dept. of Health and Social Services, Div. of Health, 1985.
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- 27) AP, Washington, "Vietnam War, Cancer Link Found", 9/4/1987.

ABBREVIATIONS

VV = Vietnam Veterans	SSX = Statistically significant excess
OC = Occupational exposure	MORX= Mortality odds ratio excess
EN = Environmental exposure	PMRX= Proportionate mortality ratio excess
XRR= Excess risk ratio	
X = Excess	

CANCERS FOUND IN EXCESS IN VIET VETS BY STATE STUDIES AND AGENT ORANGE PROGRAMS, THE USAF RANCH HAND II - BASELINE AND FOLLOWUP, THE CDC, AND THE VA. (Oklahoma Agent Orange Foundation-1988)

1983 VA A.O. Registry	LYMPHOMAS (NHL) PHARYNX or BUCCAL cavity
1983 Massachusetts	Soft-tissue sarcomas, Kidney
1984 Ranch Hand II Baseline	Skin (RH>C - more cancers) Systemic cancers (RH vs. Controls) Twice as many cancers of: Lip Oral cavity (BUCCAL) PHARYNX Testis (Testicular) Three times the cancers of: RESPIRATORY system and Intrathoracic (chest) Genitourinary system
1985 New York	LUNG LYMPHOMAS and Hodgkin's Melanoma Genitourinary system Leukemia Brain and CNS NASAL Soft-tissue sarcomas
1985 Wisconsin	Soft-tissue sarcomas, Pancreatic
1986 West Virginia	LYMPHOMAS Hodgkin's disease RESPIRATORY Soft-tissue sarcomas LARYNX Testicular
1987 CDC VES	LYMPHOSARCOMAS Leukemias Brain
1987 VA	LYMPHOMAS (NHL) LUNG All cancers combined
1987 Ranch Hand II Followup	Skin (RH>C - more neoplasms) Systemic Neoplasms (RH>C) Three times the cancers of: Oral Cavity (BUCCAL) PHARYNX Testis (Testicular) Two and a half times as many: Genitourinary system Twice as many cancers of the: BRONCHUS LUNG Soft-Tissue Sarcomas: Equal LYMPHOMA: Ranch Hand only

THIS CHART CONTAINS DATA FROM ALL KNOWN STUDIES OF HUMAN IMMUNE SYSTEM DYSFUNCTION RESULTING FROM EXPOSURE TO DIOXIN OR OTHER STRUCTURALLY SIMILAR HALOGENATED HYDROCARBONS. (For abbreviations see page 12.) NOTICE THAT THE CONSEQUENCES OF EXPOSURE: CANCER, INFECTIOUS DISEASE, AND OTHER DISEASES ARE ALL INCREASED, IN SIGNIFICANT EXCESS, IN THE FOLLOWING EXPOSED HUMAN POPULATIONS: YUSHO, MICHIGAN, SEVESO, STRUGEON, MO., AND RANCH HAND.

ID	Study	TTC	T4H	T8S	OTC	TBC	Com	PHA	PWM	DTH	Tet	C	I	O	T
1															
2	Coalite						D	D							C
3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4	Yusho	D								D		I	I	I	C
5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
6	Michigan	D							D	D		I	I	I	C
7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
8	Seveso						I	I	I			I	I	I	A
9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
10	Taiwan	D	D				D			D				I	C
11	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
12	Strugeon	D			D							I	I	I	A
13	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
14	Stehr				D									I	C
15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
16	Falk				D								I	I	C
17	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
18	Knutsen 84		D	D	D					D	D				C
19	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
20	RanchHand84	D		D		D		D				I	I	I	C
21	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
22	Texas A.O.		D	D	D			D				I		I	C
23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
24	JAMA MO		D		D				I	D			I	I	C
25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
26	Reims, Fr.		I	D											A
27	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
28	Lovelace			D	I	I									C
29	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
30	Knutsen 87	D	D		D					D					C
31	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
32	RanchHand87	D		D					D			I	I	I	C
33	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
34	CDC VES 88												I	I	C

ID 8 SEVESO "A net increase was found for 1977 over the previous year, rising from a total of 483 to 1219." *** THIS REPRESENTS A 250% INCREASE IN INFECTIOUS DISEASE, AFTER DIOXIN EXPOSURE!

ID 20 RANCH HAND "There were 113 diseases reported by history in the Ranch Handers but only 57 in the comparisons." *** A STATISTICALLY SIGNIFICANT INCREASE P=0.02.

ID 22 JAMA MO Significant excess/"other miscellaneous diseases".

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REFERENCES FOR THE CHART ON HUMAN IMMUNOSUPPRESSION BY DIOXIN
AND RELATED TOXIC COMPOUNDS

ID

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EXPLANATION OF ABBREVIATIONS USED WITHIN IMMUNOSUPPRESSION CHART

Top line of chart: TTC = Total T-cells
 T4H = T4 helper cells

Quantitative T8S = T8 cytotoxic/suppressor cells
 OTC = T4/T8 ratio (other t-cells)
 TBC = Total B-cells

Functional Com = Complement or immunoglobulin
 PHA = Phytohemagglutinin
 PWM = Pokeweed mitogen
 DTH = Delayed type hypersensitivity
 Tet = Tetanus toxiod

CONSEQUENCES C = Cancer
 I = Infectious disease
 O = Other disease

T = Type of exposure
 A = Acute
 C = Chronic

Letters within the chart: I = Increase, D = Decrease

Q. THIS CHART IS A SUMMARY OF THE BIRTH DEFECTS DATA FROM STATE AGENT ORANGE PROGRAMS & MDL 84-6273. (Prepared by: OK.A.O.F.)

ID	State	Number of Claims	Birth Defects	Fetal Death	Other
1					
2	CN	N = 1928 Claims	180 = 9.3%	106 = 5.5%	
3					
4	MA	N = 1907 Births	662 = 34.7%		Special Ed
5					122 = 6.4%
6	OK	N = 1207 Claims		224 = 18.6%	
7					
8	OR	N = 2078 Claims	562 = 27%	594 = 29%	Stillbirth
9					57 = 2.7%
10	TX	N = 346 Claims	80 = 23.1%	79 = 22.8%	
11					
12	WA	N = 5244 Claims	1206 = 23%		
13					
14	WVA	N = 354 Claims	73 = 21%		
15					
16	MDL	N = 231,309	68,878 = 30%	38,667 = 17%	

ID 2 Connecticut Agent Orange Commission, Connecticut Morbidity Study Results, March 1984. [see A.O. 1#10]

ID 4 Massachusetts Agent Orange Program, Health Survey of Massachusetts Vietnam Veterans, June 1986.

ID 6 Oklahoma Agent Orange Commission, Oklahoma Agent Orange Assistance Program Tally Sheet, July 25, 1986.

ID 8 Oregon: The Vietnam Veterans Benefits Act of 1983, Final Report, October 1986. [see A.O. Report 16#8]

ID 10 Texas Veterans Agent Orange Assistance Program, Data Sheet, March 31, 1983.

ID 12 Washington State Department of Veterans Affairs, Hotline Information, June 30, 1985.

ID 14 West Virginia Agent Orange Assistance Program, Veteran Summary Letters, May 31, 1986.

ID 16 Agent Orange Product Liability Litigation Data Base, MDL 84-6273, March 20, 1984.

Texas Veterans Agent Orange Assistance Program, Summary of the Univ. of Texas Agent Orange Birth Defects Study, 26 March 1984.

This study found a marginally statistically significant excess of children, with PATERNAL TCDD exposure, who have presented sporadic chromosomal abnormalities, a new auto-dominant mutation, or a birth defect of certain etiological classes; when compared to the frequency in the fathers of control children (with no exposure).

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REFERENCES: BIRTH DEFECTS CHART

ID

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EXPLANATION OF ABBREVIATIONS WITHIN BIRTH DEFECTS CHART

Top line of the chart:

Within the chart:

ALL = All congenital anomalies	NWM = Non-white male
ASB = Anencephalus and spina bifida	AW = All whites
CAH = Congenital anomalies of the heart	NW = Non-white
VSD = Ventricular septal defect	M = Male
ASD = Atrial septal defect	F = Female
PDA = Patent ductus arteriosus	+ = Statistically significant defect
DWN = Down's syndrome	
HMD = Hyaline Membrane disease	
T = Talipes (foot defects)	
H = Hip defects	
C = Cleft palate or lip	
S = Hypospadias or epispadias (penis defects)	

Between ID 2-20, e.g., 1/1, /1 = one of one statistically significant county out of all of the counties in the U.S.

e.g., 1/7 = one of seven statistically significant counties.

Between ID 24-53, P = Paternal exposure.

Between ID 30-33, 8-10 = counties with statistically significant excess of 8-10 birth defects.

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DISINFORMATION (MISINFORMATION) ABOUT TCDD LEVELS:
A CDC "PERCEPTION GAP" BETWEEN THE BELIEFS OF THE
CDC AND IT'S SCIENTISTS AND THE REALITIES OF WHAT
HAPPENED TO MILITARY PERSONNEL IN SOUTH VIETNAM

Recently a published report from the Centers for Disease Control (CDC), found in both their Morbidity and Mortality Weekly Report (MMWR 36(28):471) and in the Journal of American Medical Association (JAMA 258:751), stated in part that median TCDD (tetrachlorodibenzo-p-dioxin) levels "were virtually the same" for Vietnam Veterans and non-Vietnam Veterans. A CDC editorial note within the report stated, "(t)he purpose of this study was to determine whether estimates of exposure based on military records or on interviews of U.S. Army veterans can identify those with heavy exposure to TCDD". The CDC continues, "(s)erum TCDD levels measured in 1987 were not associated with any of the indirect exposure scoring methods evaluated". Also, the CDC said, "(t)he distribution of TCDD levels reported here cannot be generalized with confidence to all U.S. Army Vietnam Veterans since the study did not use a random sample of all such veterans". In other words, this CDC study is NOT A VALID STUDY, because the cohorts were not randomly sampled and because these INVALID TCDD LEVELS were used to try to validate NON-EXISTENT military exposure records.

The CDC report claims it has deliberately over-sampled men with "higher exposure scores". However, within Table 1, on page 473 of the MMWR, we find that only 29% of the three Vietnam Veteran cohorts are in the "high exposure score" category. On the other hand, the "low exposure score" category contains 46% of the total study group. Clearly, these data in this table show that the men with "higher exposure scores" WERE NOT OVER-SAMPLED as the CDC claimed. Also, from Table 1, we find that the CDC's "high exposure group" had fewer men that were either draftees or had tactical MOS's (a combat military occupational specialty). In effect, this would have under-sampled exposure in the "high exposure" category because there are fewer combatants, a subgroup more prone to exposure. Table 1 shows that the non-Vietnam Veteran control group was 59% more likely to have civilian occupational exposure to herbicides than the Vietnam Veterans that were sampled. The bottom line here is that the CDC compared a deliberately under-sampled "high exposure group" within the larger "exposed" cohort with a deliberately higher exposed control group. Again, this clearly shows that THE CDC DID NOT OVER-SAMPLE EXPOSED VIETNAM VETERANS with "higher exposure scores" but rather THE CDC DELIBERATELY OVER-SAMPLED HIGH EXPOSURES IN THE CONTROL GROUP. THIS IS DISINFORMATION.

More about how the CDC compares "apples with oranges". The CDC reported in this study that the median serum TCDD levels between the two groups "were virtually the same" and that the highest level found in the exposed group was below "the upper limit for unexposed U.S. residents". The CDC is actually comparing MEDIAN SERUM (BLOOD) LEVELS with MEAN ADIPOSE (FAT) TISSUE LEVELS. This is just like trying to compare apples with oranges. They took this adipose tissue level from Table 2 (Comparison of the Adipose Tissue Concentrations of TCDD in Populations With No Known TCDD Exposure) from a journal article, "2,3,7,8-tetrachlorodibenzo-p-dioxin Levels in Adipose Tissue of Exposed and Control Persons in Missouri" (JAMA 256:2683), written by CDC scientists. By comparing MEDIAN with MEAN, and BLOOD with ADIPOSE TISSUE (FAT) the CDC has used DISINFORMATION, AGAIN.

Also, this same study (JAMA 256:2683, 1986) states that, "(p)rior to this report, the two highest levels of TCDD in adipose tissue were (1) 1840 ppt..." "...and (2) 130 ppt...". However, in Gross et al., "Tetrachlorodibenzo-p-dioxin Levels in Adipose Tissue of Vietnam Veterans" (Environ. Res. 33:261-268, 1984), both the abstract and the study clearly describe a sample, from a Vietnam Veteran exposed to Agent Orange as containing 173 ppt. Clearly, this amount, 173 ppt, should have been the second highest amount mentioned. THIS IS MORE CDC DISINFORMATION ABOUT DIOXIN LEVELS IN VIETNAM VETERANS.

In summary, the CDC authors of these two articles, the MMWR report and the Missouri study (JAMA 256:2683), use disinformation to misinform health care professionals, the media, the public, and Vietnam Veterans and their families about the truthful information concerning Agent Orange and dioxin exposure. Should those individuals responsible for this disinformation be held accountable for the illness and additional deaths due to lack of appropriate health care information?

BRIEF CRITIQUE OF THE CDC DIOXIN SERUM LEVEL STUDY

1. The CDC claims that men with "high exposure scores" were over sampled; HOWEVER, THE CDC ACTUALLY OVER SAMPLED HIGHLY EXPOSED CONTROLS.
2. The CDC incorrectly compares MEDIAN SERUM (BLOOD) LEVELS of dioxin with MEAN ADIPOSE (FAT) TISSUE LEVELS.
3. The CDC omits a previously reported HIGH LEVEL OF DIOXIN FOUND IN A VIETNAM VETERAN.
4. THE BOTTOM LINE: The CDC states, "(t)he distribution of TCDD levels reported here cannot be generalized with confidence to all U.S. Army Vietnam Veterans since the study did not use a random sample of all such veterans."
5. O.T.A. reviewers: "for self-reported indirect exposure, CDC did find an association of dioxin levels with categories."

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DIFFERENCES BETWEEN THE "J.A.M.A." (Journal of the American Medical Association) AND THE CDC (Centers for Disease Control) MONOGRAPH VERSIONS OF THE CDC VIETNAM EXPERIENCE STUDY (VES).

CDC JAMA VERSION	CDC MONOGRAPH VERSION
1. Medical data used based on death certificates. [Less accurate]	1. Medical data used based on review of medical records. [More accurate]
2. "There was no particular type of neoplasm in excess in the Vietnam cohort."	2. "Examination of specific types of cancer shows more deaths among Vietnam Veterans from brain cancers, leukemia, and non-Hodgkin's lymphomas, all in very small numbers."
3. Risk ratio for neoplasms 0.82.	3. Risk ratio for neoplasms 1.21. [Excess]
4. Found excess post-service mortality similar to other men returning from combat areas after WWII and Korea.	4. Did not explain that Vietnam veterans actually are experiencing similar post-service mortality as ex-POW's from WWII and Korea.
5. Describe statistically significant excess deaths due to external causes.	5. Statistical significance for external causes lost.
6. Report a 0.95 risk ratio for mental disease.	6. Report a 2.85 risk ratio for mental disease (p<.06). [Excess]
7. No mention of autoimmune diseases.	7. Autoimmune diseases, including lupus, were found.
8. Released to the media for public consumption and published in JAMA.	8. NO MEDIA RELEASE OF THE MORE ACCURATE DATA IN THE CDC MONGRAPH.

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DIFFERENCES BETWEEN THE "J.A.M.A." (Journal of the American Medical Association) AND THE CDC (Centers for Disease Control) VERSIONS OF THE CDC VIETNAM EXPERIENCE STUDY (VES), HEALTH STATUS OF VIETNAM VETERANS, II. PHYSICAL HEALTH.

CDC TESTIMONY BEFORE THE SENATE or JAMA EMBARGOED NEWS RELEASE and subsequent news reports based on these 2 items.

WHAT THE JAMA ARTICLE ACTUALLY SHOWS OR REPORTS (* - the Ranch Hand Studies found similar results)

- | | |
|--|---|
| <p>1. "Physical and laboratory examinations shows few current differences between the two groups despite the many differences elicited by telephone interview." (CDC, James O. Mason, Senate testimony - 5/12/88)</p> <p>"On examination, we found no differences between cohorts in these health effects, such as skin conditions,hepatic dysfunction, ...". (JAMA news release - 5/12/88)</p> <p>"No difference in fertility between the two groups was found." (JAMA news release)</p> <p>"...the prevalence of reported medical problems among those examined was similar to the prevalence in the total telephone interview group." (JAMA article - 5/13/88)</p> | <p>1. MEDICAL EXAMINATION OF VIETNAM VETERANS ACTUALLY FOUND STATISTICALLY SIGNIFICANT EXCESSES OF:</p> <p>a. * Health status "fair/poor"</p> <p>b. Somatic symptoms</p> <p>c. * Hypertension</p> <p>d. CHLORACNE and other skin conditions</p> <p>e. * Other liver conditions</p> <p>f. Fertility difficulties</p> <p>g. Decreased concentration and proportion of normal sperm cells.</p> <p>h. High-freq. hearing loss</p> <p>i. * Increased fasting glucose</p> <p>j. * Higher mean thyroid stimulating hormone</p> <p>k. Stool occult blood</p> <p>l. Evidence of past hepatitis B infection</p> |
| <p>2. "Vietnam Veterans Health Held No Worse Than Others"- "The problems are termed psychological, not physical." (NY Times, 5/13/88)</p> | <p>2. THE MANY DOCUMENTED PHYSICAL HEALTH PROBLEMS OF VIET VETS WERE NOT MENTIONED IN: JAMA, SENATE TESTIMONY OR THE MEDIA.</p> |