

This Document has been provided to you courtesy of Veterans-For-Change!

Feel free to pass to any veteran who might be able to use this information!

For thousands more files like this and hundreds of links to useful information, and hundreds of "Frequently Asked Questions, please go to:

# Veterans-For-Change

Veterans-For-Change is a 501(c)(3) Non-Profit Corporation Tax ID #27-3820181

# If Veteran's don't help Veteran's, who will?

We appreciate all donations to continue to provide information and services to Veterans and their families.

https://www.paypal.com/cgi-bin/webscr?cmd=\_s-xclick&hosted\_button\_id=WGT2M5UTB9A78

# Note:

VFC is not liable for source information in this document, it is merely provided as a courtesy to our members.



we'll have --

23

24

25

medical facilities, or some combination of the two. There is some still questions that need to be answered.

MR. WALKUP: Then, assuming some turnaround time in redeveloping an RFP, selecting a contractor, and so on, that would take us into 1989 or 1990 or something like that, another three to four years?

> DR. SHEPARD: I hope 1986 - 88 time frame

MR. WALKUP: Okay. Then the three to four years were not on top of the pilot study?

DR. SHEPARD: Yes. Yes. I'm sorry. It would be probably '88 - '89.

> MR. WALKUP: Okay. Thank you.

DR. SHEPARD: Are there any other comments from other members?

MR. LeVOIS: I just hope that those times can be shortened somewhat. I have been operating under the premise that the full blown study, once it begins, could be conducted on such a scale that it would only take about two years to conduct the full study.

I don't know whether that's feasible, but I think, looking at the Ranch Hand experience, they're trying, and very reasonably so, to keep the data collection period within a couple of years, so that you don't run

into other confounding factors. You don't want your subjects at the end of the study to be four years older than your subjects at the beginning of the study, for instance.

So, I don't think that we want a four year, full scale study. But, this is all rather difficult to tie down. I just will assure you that we'll continue to push for a shorter time frame.

MR. WALKUP: We definitely support that. Just one other series of questions, if I may. I know I've taken a lot of time, but our chances are infrequent.

On the brochures, I understand -
I wanted to clarify where we're at in mailing these to the people who've taken the exams, already, who are on the Registry. Have those been mailed or are there plans to mail them to everybody?

Where are we?

DR. SHEPARD: If they haven't started, it's about to happen. I don't know exactly. That particular effort is not being handled directly out of our office. We've been cooperating with the Office of Public and Consumer Affairs. They've taken the lead on this initial mail out, in the development of the automated mailing lists.

Our efforts have been directed towards a follow-up, a very brief questionmaire to each of the veterans

who are currently in the Registry; and, also to get a good, recent address.

So, there are really two parallel efforts going on. And, between those two efforts, hopefully, everybody in the Registry will soon get, at least, copies of this information. And, then, of course, there are efforts going on to develop other information packets.

MR. WALKUP: Has the questionnaire gone out yet, then?

DR. SHEPARD: No. But, it's about to go out.

I mean -- it's cleared OMB and it's -- I think -- in the final stages of printing; so, it will go out in two fashions. The hospital will be provided with those mailing addresses that we think are accurate, and so that they can actual label -- so they will be able to put these labels on the letters to the veterans.

In those areas where they have evidence that the veteran has come in for an examination, but he is not one that has a mailing label, the hospital will develop its own methodology for getting the best possible mailing lists. It should be getting out there soon.

MR. WALKUP: Okay. I hadn't gotten mine yet that's why I was asking.

DR. SHEPARD: Okay.

MR. WALKUP:

relates to that that has the Privacy Act notice been filed for this system of records that's generating the mailing?

DR. SHEPARD: Ah, I --

MR. WALKUP: Or, maybe that would take a little bit --

DR. SHEPARD: The Privacy Act?

MR. WALKUP: Under the Privacy Act, there's a requirement that notice be filed in Federal

Register, stating what's contained in a system of records that's being used; to let people know what -- what records are being maintained and used by the federal government for a specific purpose.

DR. SHEPARD: Okay. That's a legal question.

Is Mr. Conway here? Okay. The question relates to whether or not we have published in the Federal Register

a new system of records relating to the mailing address of the individuals in the Registry. I suspect that this has been cleared by general counsel; whether or not it meets the test for a new system of records, I think is the way --

MR. WALKUP: Under the Privacy Act.

MR. CONWAY: We are not considering this to be a new system of records, but rather it comes under the

existing system of records that now exist for medical records. It's not a separate system. It's a part of the medical records system -- a subset of it.

MR. WALKUP: Then, a veteran identifying in a claim, his general medical records would be also identifying his Agent Orange examination records. Is that correct?

MR. CONWAY: I'm not sure I understand the question.

MR. WALKUP: In filing a claim, we're required to identify the particular record -- the particular set of records, out of 60 or so, that could be maintained.

MR. CONWAY: Filing a claim under the Privacy
Act?

MR. WALKUP: No. A claim for compensation or what are requests for health care, whatever, with the Veterans Administration; we're required to identify the system of records in which information relating to that claim might be contained. And, my question was if

in just identifying our general medical records, we also are identifying our Agent Orange examination records. Are those kept in the same box?

MR. CONWAY: The Agent Orange examination records is a part of the medical records of the individual, maintained by the station where he had that examination.

And, when he transfers to another regional area, covered by a different medical center, those records would go along with him. So, it is part of the same medical records. It's not a separate record, maintained independent, and separate and apart from the main medical record of the individual veteran.

MR. WALKUP: Okay.

MR. CONWAY: That's why we have said that the records, addresses, and so forth, are -- medical records system of records that we have already had a notice in the Federal Register for.

MR. WALKUP: And, then, it's just a copy of that part of those records that's maintained in the central Registry. Is that correct?

MR. CONWAY: I don't -- it's a copy of -there's not really a copy of the medical record.

Dr. Shepard can probably speak to what exactly it is that
we have here. But, the Agent Orange examination, as I
said, is part of the major -- the complete medical record
of the veteran. It's not a separate record.

It's only separate in so far as we have data on who has, among all the medical records that we have in the VA system, who among those have had the Agent Orange examination. I don't know if I'm answering the question.

MR. WALKUP:. Yes, I think you are. Thank you.

DR. SHEPARD: We don't have two separate -there isn't an Agent Orange medical record system and an
everything else medical system. A veteran comes in for an
Agent Orange examination. He's never been there before.
They will establish a record for him, but it will be the
same kind of a record as if he had come in for acute
appendicitis or an outpatient visit, or whatever.

There isn't a separate system of medical records developed for the Agent Orange. Fred said there's an identifier in a separate card file. Anybody coming in to the VA is suppose to have a three by five card filled out on the individual indicating if he has had the Agent Orange examination.

And, that process in the process of being automated here.

MR. WALKUP: Thank you.

DR. SHEPARD: Any other comments or questions for Mr. Walkup from the Committee? We now have a few minutes, and I entertain questions from the floor. I have already been provided some questions.

# COMMENTS AND DISCUSSION

DR. SHEPARD: The first one is: Could the Advisory Committee please comment on a

recent award of 58 million dollars

for the 1979 chemical spill from the ruptured.

is

will the recent verdict have on herbicide-related law suits filed by Vietnam veterans; and does the Committee plan to review transcripts from the trial?

First of all, I would remind you -- those of you who are not familiar with the details of this case

-- the tank car contained 30,000 gallons of orthochlorophenal, which is not a herbicide. It's an organic solvent, alleged to contain 22 parts per billion of TCDD, presumed to be

2, 3, 7,8-TCDD. So, that's the only relationship to -- to Agent Orange that I'm aware of.

From what little I gleaned in the last few days as a result of this, orthochlorophenal has some toxic potential with probably five Cs of toxic potential for herbicides. I don't know that from a personal study, but that's - I think reasonably good information.

First of all, we do not have the details of the health status of the 49 -- or 47 railroad workers

-- for whom this verdict has been rendered. So, we don't what their problems are medically. So, we can't answer the question as to what relationship this will have to Vietnam veterans.

The second question: Does the Committee plan to

review the transcript of the trial? I'm not sure that we would task the Committee with reviewing the transcript of the trial. I'm sure that there'll be some interest in our general counsel's office -- there already has been -- as to the details of the trial.

Mr. Conway, do you have any comments further on that?

MR. CONWAY: The newspaper accounts only came out last Friday, and we have been trying to get more detailed information as to what exactly the nature of the claims by the workers was, what the nature of the verdict made by the jury was, whether it was a special finding or a general finding, what was the nature of the evidence that was presented in the case; and, we are trying to track that down.

But, it's not a reported decision, in the sense that it's not in the books someplace that we can go and look up and read the court's decision. It's a jury verdict at the lowest trial court level. And, we're having some degree of difficulty in tracking down who would we talk to about the trial. And, we're trying to get in contact with the Clerk from the court's office and see whether a transcript has been prepared thus far, and if so we will try to obtain that transcript and the evidence that has been presented, the exhibits, and so forth.

Once that is all done, we will analyze that and

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

make any recommendations that we feel are appropriate to the Chief Medical Director and Chief Benefits Director, and ultimately to the Administrator, as to whatever impact this particular court case has on the agency's policies.

As Dr. Shepard -- I'm sure -- would agree with, that we're very much interested in this particular case because it is relevant, in so far as they're both related to dioxins. And, whatever information we can get that will shed more light on the issue and help us prepare a comprehensive and fair policy, we're going to pursue.

Beyond that, we have nothing further to say at the time.

MR. LeVOIS: I think that one constructive line of evaluating this, even before we have an opportunity to review transcripts, which I understand sometimes take months to prepare and are several feet thick, would be to talk to. I think, Dr. Bertrum Turno who was quoted in the Times and also interviewed on television yesterday It might be very useful for us to consult with morning. him and learn from him what scientific work, if any, he did.

We don't know, really, without good information about the trial and his role in the trial and whether or not background surveys of the health problems in that among workers who didn't participate population,

in the cleanup, were conducted. We just don't know what was done, what kind of scientific evaluation was conducted. But, we should pursue Dr. Turno, I think, and try and learn from his experiences there.

DR. SHEPARD: Any other comments or questions from members of the Committee? It's obviously an interesting case. It has some repercussions, I think, in our activities, and it behooves us to be knowledgeable, as Maurice and Fred have indicated, in the area.

I would just like to caution making a brisk link between this and Agent Orange, because I think the circumstances of exposure, certainly the chemicals involved, and so forth, are somewhat different.

I hope that answers the question.

This next one: Could we obtain a brief summary of the physiologic testing for exposure and reaction to 2, 3,7,8-TCDD performed, indicated under further study, including fat isomer analysis, liver enzyme study, serum, cholesterol, and triglyceride, --, lymphisite impairment, chromosome studies, nerve conduction, velocity, et cetera? That's a long question. Yes. We'll be happy to share any information that we have with anybody in that regard.

We as we've already alluded to, a fair amount of this has been referred to in the literature

analysis -- this comes from Dr. Shetka: I hope we've provided you with a copy of the JRB two volume work.

an additional great source of information. I know Al Young has been collecting reprints as they occur, and probably has one of the best reprint libraries, at least, on this subject. And, I'm sure he'd be happy to share that information with you.

As I said earlier, we are in hopes of awarding a contract for an update of the literature analysis; and, particularly we want a more in-depth evaluation of the human studies that have been conducted. We need to have those fleshed out.

But, we certainly will be happy share any information.

In light of Illinois and Mississippi Commissions

testimonies, will this Committee actively

consider observer or member status for state commissions/
agencies? This comes from Ruth Leverett from the New

York State Dioxin Commission.

It's a good question, Ruth. I think that there might be some virtue to establishing an interstate organization. It's not that we don't want to -- and we have, and you know -- cooperated with states in a number of areas.

--

I think it might be better for the states to take
this on as their own initiative. And, as I say,
this is not in any way a ducking a responsibility
that we have. But, I think that the states would find,
perhaps, that their effectiveness was enhanced if a little
bit of distance was put, institutionally or systematically,

between your organizations and the federal government.

I just follow very quickly to say that I don't want to suggest that we won't be very happy to cooperate in any way that we can in terms of information sharing. But, in terms of the VA or any other specific agency in the federal government consciously establishing an interstate grouping might not be the best way to go.

That's just a personal opinion, although it's not only my opinion. I have heard others say the same thing. But, I don't think that the last chapter has been written on that subject.

In terms of representation, on this Committee that issue has not been looked into in any great depth.

If there are some persuasive reasons for doing that, I'd be happy to hear them. And, I certainly would be happy

as to whether or not there should be systematically state representation, not if -- if the states do organize an interstate body or association, or what have you, then I think it would be entirely appropriate to have somebody from that interstate association to be represented here.

I think it would be difficult for us to choose which state should be represented on this Commission; and, now some 30 states which have active Agent Orange commissions of one kind or another. And, I think it would swell this body if we attempted to have each state represented officially, to a point where we might find it difficult to conduct business.

Other comments from members of the Committee?

Can I assume that silence is tacit agreement?

The next question: In regards to your mortality studies, how are we going to determine Vietnam service when so many records were destroyed in the St. Louis fire? Jim King from Illinois.

It's my understanding -- and please correct me
if I'm wrong -- that the -- the St. Louis fire involved
World War II veterans records. And, I think Vietnam
veterans pretty much escaped that conflagration. But, I
may be wrong. Yes, sir?

MR. JAMES KING: Not meaning to argue with Dr. Shepard, but we've had several of our witnesses who appeared before us claimed to have had trouble supporting a claim because they have been told that their records they requested were destroyed in the fire in St. Louis.

DR. SHEPARD: Okay. That's a question. Obviously, it needs an answer. As I say, I was laboring under the impression that if there were Vietnam veterans records destroyed in that fire, that they were very few in number.

Now, that isn't to say that there may -MR. KING: Maybe we just run into those few.

MR. LeVOIS: There are a couple of people in the audience who are experts, both in DOD and in VA records. Would anyone care to comment on whether or not Vietnam veterans records were destroyed in that St. Louis fire?

DR. SHEPARD: Let me call on Mr. Richard
Christian, who is heading up the Army Agent Orange Task
Force. Dick?

MR. RICHARD CHRISTIAN: My answer is short and sweet. By and large, most of the Vietnam era records are in place in St. Louis. There are a few. The fire encompassed records up until 1959 -- 1916 to '59. So, we pretty well have the Vietnam era covered. There may be

a few, as you say. But, those can be dealt with by reconstructing ones records.

DR. SHEPARD: would it be appropriate then, to suggest that any state agencies which have impression that the record on a given constituent is not available as a result of the fire, or for any other reason;

that information could be made known to us or to you; and maybe some effort could be made at determining why that record isn't available.

MR. CHRISTIAN: They can contact me personally and we'll follow up.

DR. SHEPARD: Thank you very much, Dick. Does that answer your question?

MR. KING: If we run across any more of these, we'll be glad to give you the man's name so that you can assist him.

DR. SHEPARD: Fine.

There's a certain amount of loss of records that occurs from time to time. I'm sure there's a certain percentage of records used that simply get lost in the process of moving around, or whatever.

But, it's my understanding that that is pretty much at a minimum.

Okay. I have a question now from the National Veterans Law Center: At the February 25, 1982 VA

Advisory Committee, you said that with regard to -protocol, within two months we should have a final product.

What is the status of the protocol review at this time,
some six months later?

Okay. I think I answered that question
earlier. If you're asking for excuses, why we went from
two to six months, I'm not going to get involved in
that. But, I think you've been given an accurate
description of where the status is. It's being reviewed
by the National Academy of Sciences; and
we hope to have their report in about three weeks.

In the meantime, we are working on the final fine tuning of the protocol for the pilot study and hope to have the contract awarded early in the next calendar year, if not before.

MR. LEWIS MILFORD: If I could follow up on that a second, when will there be a decision made as to who will conduct the study?

DR. SHEPARD: The full study?

MR. MILFORD: Yes.

DR. SHEPARD: Probably some time during the course of the conduct of the pilot study or towards the end of the pilot study.

MR. MILFORD: Who will be conducting the pilot study?

DR. SHEPARD: That will be done by contract.

MR. MILFORD: Other than Dr. Spivey?

DR. SHEPARD: Dr. Spivey association with this effort, at least in this phase, has been terminated.

MR. MILFORD: So, it could be an entirely different contractor?

DR. SHEPARD: It will be.

MR. MILFORD: You're sure it will be?

MR. CONWAY: We're going to be issuing a separate RPF, requesting proposals to be submitted by potential contractors, who wish to conduct the pilot study. Whomever -- we don't know who that will be, until we get the proposals submitted.

It may or may not be UCLA. It may be some other organization. There's no prior selection or determination as to who is going to be qualified to bid or who is not going to be qualified to bid.

And, we won't know who -- even the pool of contractors -- potential contractors will be until after we get the responses to the RFP.

DR. SHEPARD: Excuse me. -- First I think the question -- the problem of identifying cohort of exposed veterans has been a critical issue, I think -- a critical issue since Congress ordered the VA to do an

epidemiological study almost two years ago. Question: A

year ago -- during Senate hearings, re Dr. Spivey's protocol,

critics of the Agency called for independent

epidemiologists to develop such a protocol, rather than

having the Defense Department go ahead without

expert assistance.

Now, we are told that the VA has just begun to develop the protocol with the work group. How does the VA defend the extraordinary inability to anticipate the scientific difficulties that others saw all too clearly years ago? Also, what prompted the VA to decide now that epidemiological help was needed to develop an exposed cohort?

Well, I think that-as I tried to indicate earlierthat the process of cohort selection has been evolving
over some time now. And, part of that process has been
the elucidation of new information which colors the process.

So, what was thought to be an appropriate cohort selection procedure a year ago, may no longer be all together valid. I think that's part of the explanation.

We also are hoping to have on board a group of individuals experienced in the whole area of major epidemiological research, as I also indicated earlier.

And, in the mean time, we have solicited expert opinions

from within the federal government and outside of the federal government: this group and other individuals, in order to grapple with some of these more difficult questions as they related to sampling and cohort selections

MR. MILFORD: If I might follow up on that, it will -- this December will be three years since Congress ordered the VA to do the epidemiology studies. Since that time and before that time, the question of who was exposed was probably the most pressing issue. On that point, the VA could have hired somethree years later an epidemiologist to conduct the work that needs to be done to assist in developing this cohort. Now we are talking now about a process that will take months into the future to develop the cohorts -- a problem that has been around for three or four years.

DR. SHEPARD: Well, it was hoped that the UCLA contract would have answered most, if not all, of these questions. I guess that may have been somewhat unrealistic, but nevertheless that was our hope. We thought we hired the best minds in the Country to do that work for us.

And, without casting dispersions on the UCLA effort, I think the complexity of the problem was not fully anticipated. And, UCLA, I think, gave it its best shot, but there are still some unanswered questions.

5 8

7

8

9

10 11

12

13

14 15

16

17

18

19

21

20

22

23

24

25

And, we had no way of -- of determining what those unanswered questions would be when we awarded the contract; nor even when the contract was completed, until we went through this review process.

So, all I can say is that we are continuing our efforts at cohort selection. We think we are a lot closer to it than we were a year ago or even six months ago.

Dr. Hodder has been working very hard grappling with some of these points that were not clarified in the UCLA protocol.

MR. MILFORD:

What was the nature of the new data that has just recently come to light that caused you to get expert help?

DR. SHEPARD: That's

not the impression I tried to make.

said repeatedly this morning, I think, is the whole process has been an evolutionary process. don't think there's any startling new data that has just come to light. If there is any, I'm not aware of it. And, I certainly didn't try to imply that that was the reason for now having to recruit

expertise in this area.

MR. MILFORD: Well. I'd like to clarify this. It seems to me that the same information which was

available months or years ago, that should have prompted you then to seek the help that you're now seeking. Why wasn't that done? Why do we have to wait probably another year and a half before you figure out who was exposed?

DR. SHEPARD: Again, you have misunderstood my -- I thought -- lucid attempted explanation. We hope to have the cohort selection protocol -- the cohort selection protocol -- the methodology to select the cohorts for the study completed within the next six weeks, not a year and a half from now.

MR. MILFORD: Then, how long after that will you have your cohort selection?

DR. SHEPARD: I'm sorry. I didn't hear you.

MR. MILFORD: You have a protocol to do.

DR. SHEPARD: Yes.

MR. MILFORD: How long will it then be before you confirm the ramifications -- of using the protocol?

DR. SHEPARD: I'm sorry -- the proper what?

DR. YOUNG: How long will it take to select the cohort once the process is ready to start?

DR. SHEPARD: Okay. The expert on that question is in the room; and, maybe I can call on -- once again Mr. Dick Christian. He hasn't seen the protocol. So, it'll be difficult for him to answer exactly. But, I think he may be able to give

you a better ball park figure than I.

MR. CHRISTIAN: First of all, the Army Agent
Orange Task Force is prepared to start right now. So that
once we're given the order to seek these cohorts, we'll
have them for the pilot study in six months.

MR. MILFORD: Thank you.

DR. SHEPARD: Are there any other questions from the floor? We still have a few minutes. Yes?

MR. MILFORD: I'd like to ask one last question.

DR. SHEPARD: Of course.

MR. MILFORD: I'd like to follow on the testimony of the gentleman from Australia and also to some extent the jury case that was cited last week. A recent Congressional report on the super-fund legislation, that is the legislation that dealt with--hazardous wastes and chemical exposure, has recommended to Congress that it's virtually impossible for people in cases of chemical exposure to prove individual cases of cause and effect. Their recommendation to Congress is that a series of presumptions be established on exposure. Any other system is unfair to the individual.

Has the Agency given any consideration to adopting a series of presumptions on — exposure and causation — to shift the burden from the veteran to the government like the Australian cases? And, does the Administration have any comment on whether the existing system is fair to veterans?

DR. SHEPARD: Your question is really outside of my personal expertise. That is a claims adjudication question that is really not under our purview

I'm, first of all, not personally familiar with that document. Fred, are you? Can you shed any light on that?

MR. CONWAY: My understanding -- correct me if

I'm wrong -- but -- in the proposal, it is pretty much

known what the result of exposure is. You just don't know

who, within the exposed population, in fact, experienced it.

Is that the one you're talking about?

MR. MILFORD: No. It deals with the same problems as the exposure to chemicals and the cause is unknown.

It is recommended that the government establish presumptions of causation and exposure so the individual himself or herself does not have to bear the burden of proof. It's that question that exists in this case. The question is whether the VA is doing anything to approach that?

DR. SHEPARD: I'm not quite clear, Lew. Who made the recommendation? Is that in the statute -- established super-fund legislation?

MR. MILFORD: I think it's irrelevant who made it.

DR. SHEPARD: Well, it isn't irrelevant who made it. I don't think.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17 18	
	-

MR. MILFORD: It's a mandated group that's made recommendations to Congress on super-fund. The point of it is it's a system of presumptions of shifting of burden to government rather than laying them on the individual. I think that's a fair system. Is it a fair system -- a fairer system than the one you do have now.

DR. SHEPARD: Well, as I indicated earlier, I -- I'm not fully familiar with that legislation or really that process. I can assume that somebody in the VA is aware of it and is taking that under proper advisement. But, I can't personally.

Are there other members of the Committee that have any knowledge of that or can shed any light on this?

Are there any other questions from the floor?

If not, I thank you very much for your patience and indulgence. Okay.

(Whereupon, at 12:00 p.m., the meeting was adjourned.)



# Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

(Fourteenth Meetings) November 30, 1982

1	VETERANS ADMINISTRATION
2	
3	
4	
5	•
6	-
7	
8	ADVISORY COMMITTEE ON HEALTH-RELATED EFFECTS OF HERBICIDES
9	
10	
11	Veterans Administration Central Office Room 119
12	810 Vermont Avenue, N. W. Washington, D. C. 20420
13	
14	November 30, 1982
15	
16	
17	
18	
19	
20	
21	
22	
24	
25	

# TRANSCRIPT OF PROCEEDINGS 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

November 30, 1982

The Committee met, pursuant to notice, at

8:30 o'clock, a.m., BARCLAY M. SHEPARD, M.D., Chairman presiding.

## MEMBERS PRESENT:

BARCLAY M. SHEPARD, M.D., Chairman Acting Director Agent Orange Projects Office (10A7) Veterans Administration Central Office Washington, D.C. 20420

ADRIAN GROSS, PH.D.
Senior Science Advisor
Hazard Evaluation Division
Office of Pesticide Programs
U.S.Environmental Protection Agency
401 M Street, S.W.
CM #2 TS-769
Washington, D.C. 20460

RICHARD A. HODDER, M.D., M.P.H.
COL, MC, USA
Deputy Director, Division of Medicine
Walter Reed Army Institute of Research (WRAIR)
Washington, D.C. 20012

PHILIP C. KEARNEY, PH.D. Chief, Pesticide Degradation Laboratory Agricultural Environmental Quality Institute Department of Agriculture Building 050 - BARC West Beltsville, MD 20705 CAROLYN H. LINGEMAN, M.D. National Toxicology Program Room 3A06 Landow Building National Institutes of Health Bethesda. MD 20205

FREDRICK MULLEN, SR.
Claims Consultant
Paralyzed Veterans of America (817A)
Room 117
811 Vermont Avenue, N.W.
Washington, D.C. 20420

THEODORE P. SYPKO
Field Representative
Veterans of Foreign Wars
of the United States
200 Maryland Avenue, N.E.
Washington, D.C. 20002

CHARLES A. THOMPSON
Administrative Assistant
National Service and Legislative Headquarters
Disabled American Veterans
807 Maine Avenue, S.W.
Washington, D.D. 20024

# ALTERNATE MEMBERS OR SUBSTITUTES PRESENT:

(For IRVING B. BRICK, M.D.)
THOMAS J. FITZGERALD, M.D.
Medical Consultant
National Veterans Affairs
and Rehabilitation Commission
The American Legion
1608 K. Street, N.W.
Washington, D.C. 20006

(For J. DAVID ERICKSON, D.D.S., PH.D.)
JOE MULINARE, PH.D.
Birth Defects Branch
Chronic Diseases Division
Center for Environmental Health
Centers for Disease Control
Atlanta, GA 30333

(For JON R. FURST)
HUGH WALKUP
Department of Human Resources
City of Seattle
400 Yesler Building
Seattle, WA 98104

# INDEX

PRESENTATION OF:	PAGE
Call to Order and Opening Remarks Barclay M. Shepard, M.D., Chairman	1
Remarks by the Chief Medical Director Donald L. Custis, M.D.	3
GAO Report on VA Agent Orange Examination Program Mr. John Hansen	14
Chloracne Task Force A. Betty Fischmann, M.D.	31
Report from AMVETS Mr. Peter Currier	39
Recent Literature/Dioxins Symposium Alvin L. Young, Ph.D.	43
Air Force Health Study Alvin L. Young, Ph.D.	51
State Activities Mr. Robert Santos George Anderson, M.D.	57 67
CDC Birth Defects Study Update Joe Mulinare, Ph.D.	78
Veterans Service Organizations Activities	83
Suggestion for Additional Research Committee	88
Comments and Discussion Audience	101
Adjournment	111

# CALL TO ORDER AND OPENING REMARKS

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

DR. SHEPARD: Ladies and gentlemen, welcome to the 14th meeting of the VA Advisory Committee on Health-Related Effects of Herbicides. We're very happy to have you all here. We have a fairly full agenda, as usual, today, so I will proceed. I'm delighted that we have our usual full house of visitors and we're particularly pleased that as many members of the committee are present as could make it. We have, we are particularly pleased today to recognize the presence of a number of representatives of state Agent Orange They will be represented later on in the organizations. meeting by Robert Santos, who will speak on behalf of the relatively newly organized coalition, or association, of these organizations. I don't know whether they have an official title yet.

As you know, we've been working with the various state organizations in, I think, a close cooperative spirit and we're delighted to have you ladies and gentlemen here again this morning. Later on in the day the state representatives will be meeting with Mr. Alvarez to discuss some special concerns that they wish to bring to the attention of the administration.

We also will be hearing from Dr. Donald Custis, our Chief Medical Director, who will have some announcement\$ to make which I think will be of interest to all of you.

-2-

There have been a couple of last minute changes on the agenda. Unfortunately, Lt. Col. Brown from the Air Force was not able to be with us because of a conflict in schedule and the Air Force's Health Studies report will be given by Major Alvin Young.

At the last minute, Dr. David Erickson from CDC was unable to come, but he has sent his very able assistant. Dr. Joe Mulinare and he will give us the report on the status of the CDC Birth Defect Study. We are happy to have you here Dr. Mulinare.

For those of you who have not had a chance to do so, will you please sign in at the guest registry in the lobby to register your presence here. We're always interested to know who is attending our meetings and its very helpful for us to have that information. As usual, we will have a question and answer period at the close of the formal agenda and we would encourage all of you who have questions to write them down on a card. Don Rosenblum will circulate among you to provide you with cards and pencils and collect your questions so that we may have them at the end of the formal session.

I have an important announcement to make in that recently Dr. Raymond Suskind has sent in a letter of resignation. His very busy professional schedule has made it difficult for him to take an active role, as active a role

in the activities of this committee and he felt that it would be best he resign from the committee. He has very graciously, however, consented to continue to be available on an as needed basis for counsel and advice. We certainly thank Dr. Suskind for efforts on behalf of the committee and his presence will be missed.

I see Dr. Custis has joined us and I think because of Dr. Custis' very busy schedule, I'll ask him to address the committee now. Good morning, sir.

DR. CUSTIS: Good morning. Well, its been a while since I last met with you and I was just anxious to do so today because of changes underway in the epidemiology study.

There are some things on my mind that I wanted to pass on to you.

First of all, I wanted to express my appreciation.

I hope you are assured how much we have and do appreciate

the help you're providing us and have given us over a long period of time. It doesn't seem possible that we've been

split over the Agent Orange now for 5 years. I'm sure
you're all informed about the pending

transfer of responsibility for the epidemiology study to CDC.

Let me recapitulate for you. The VA came into more and more criticism, mostly for the time lag in getting

on with the study. In fact, our credibility has been under challenge now for some time, as you all know.

The House Oversight Committee, probably stimulated by Congressman Daschle, reached a consensus that was
expressed in a letter to the Administrator from Chairman
Montgomery, suggesting that everyone's purpose would be
better served if the responsibility for this study were
passed to a non-VA agency and that there would always be,
even at best, a perception of conflict of interest were the
VA to continue as the responsible agent. The Administrator
intitially was reluctant to agree, understandably. I'm
sure, well, this has been expressed in the media by some
individuals, the VA's willingness to transfer the study was
interpreted as still another manifestation of the VA's lack
of interest. Of course, that is patently not true.

But, to make a long story short, the Administrator did agree and I too agreed, that all things considered, whatever the ultimate outcome of that study, it would have greater acceptance if the VA were not involved. Those of you who attended the Congressional hearing which antedated this decision, will recall that representatives from CDC manifested some interest in doing the study or, at least, went so far as to say they could do a quicker job of it. CDC now is going to do the study. We have had a couple of

meetings with Dr. Brandt and Dr. Hardy discussing the nature of an interagency agreement. It hasn't been consummated yet mainly because Dr. Brandt's interest to have an informed estimate as to the resources required. The VA will have just one responsibility and that is to continue to be the vehicle for resources passing through our budget to the CDC towards this study. The reason for that is, that the VA committees in Congress are anxious to maintain jurisdiction over the study and with that budgetary arrangement, are assured of having that continued oversight.

Similarly, HHS is interested in such budgetary arrangement in order not to risk having to divert other resources to support the study. They are more assured of line item budgeting with this arrangement. I think we are close enough to an agreement that I would hope it would be signed before the first of the year.

Meanwhile, you've also witnessed over a period of time, different organizational arrangements within the VA regarding Agent Orange responsibility. When Chuck Hagel was Deputy Administrator, because of his interest and because of the Administrator's interest in providing Chuck with specific Agent Orange responsibility, a second office was created in the Administrator's staff. The simplest explanation for the current reorganization is that there

will be no continued duplication of responsibility. The sole responsibility for Agent Orange program will rest in DM&S.

We have been, for several weeks now, pursuing the recruitment of an epidemiologist to serve on a full-time basis. We have had the part-time services of Dr. William Woodward as an epidemiologist and also Dr. Susan Mather, but they have not had full-time assignments. We would like to acquire a well-qualified epidemiologist who will be available for employment on a full-time basis to assist us in our bio-medical research pursuits.

There is just one more thing I would like to address. One of our Advisory Committee members has recently asked to be relieved of his responsibility and he's written a letter explaining his reason for doing so. He said that he didn't think the Advisory Committee was able to accomplish its full potential simply because of the open meetings and the very popular attendance at these meetings. That if the nitty-gritty of the scientific aspects of Agent Orange were to be addressed, this was not the way to do it. On the other hand, I think you'll all agree that this serves a very valuable purpose, having these open meetings and having attendance from all of you who have your own constituencies.

I think the reasonable compromise is, hereafter, to keep this format, but to add to it an executive session. I hope you'll all understand the reason for my asking you to go into this type format. We cannot hold an executive session unless it is announced ahead of time in the Federal Register. The next meeting announcement will list an executive session. We'll see whether the expertise present around the table can address some of these problems in a little more depth and with a little more accomplishment than afforded by the open meeting that we've been experiencing so far.

I would be happy to receive any comments. I hope I have given you a satisfactory explanation for what it is we want to do.

MR. GROSS: Let me say something, because I think that's an excellent idea. In fact, in the past Dr. Shepard has, on occasion, needed the committee's advice on various problems --. I mean I could think of several instances that, in fact, this has been done in the past and worked very well and I think the open forum here very useful in that we get input from Veteran's organizations-individuals in the field and so on. It's very informative, but I also agree with you that those executive sessions where we can sort of let our hair down in the give and take

of science. I think that's an excellent idea.

MR. WALKUP: I think one of the roles of the Advisory Committee is scientific information and I can recognize what you're talking about. Try to give some chance for scientific dialogue in the course of analysis of what some of the proposals are and the things that you were talking about. Another role of the Advisory Committee, I think, is to give concerned veterans and Veteran's organizations the opportunity to have some input in the decision process that is taking place --. In a lot of ways what's happened here is because of those organizations and because of those things and I think there is a valid interest and role for that kind of input. And I would be concerned that by closing the meetings, some of that could be lost.

DR. CUSTIS: Let me say again, I hope I'm not misunderstood. I am not proposing the entire meeting be closed,
but to continue like this and at the tail end of the meeting
to go into Executive Session and to have a portion, a minor
portion, of the meeting a closed session. I didn't mean to
discontinue the open session.

MR. WALKUP: Could you be more specific about what agenda items would come up in the Executive Session?

DR. CUSTIS: I think you could answer that as well as I could. The research that we have underway, the scientific aspects of that research. You would be free to

-8

use scientific language not completely understandable to everyone attending an open session. I think you will be more free to give us your hard scientific opinions. If you find such arrangement does not lend itself to greater accomplishment, why that's up to you. As I say, this was precipitated by one individual expressing the feeling there was something missing in our utilization of the committee.

DR. WOODWARD: My name is Woodward. I'd like to speak to that point. I chair a committee, a lay committee, known as the Armed Forces Epidemiological Board. We have open meetings and minutes are kept. Also, there are smaller meetings, executive sessions. These smaller meetings are participated in by persons who possess knowledge of the pertinent problem. If there were no smaller meetings, we would not accomplish our task. Nothing is discussed in the executive meetings which is not open information. Minutes of the general session, the executive committee meeting and specialized --groups are recorded and published. I would certainly support the Chairman, Dr. Custis, in that much can be accomplished in a shorter time with smaller groups: certain problems cannot be fully discussed comprehensively in large open meetings even if scientifically-qualified persons are present.

DR. CUSTIS: Dick?

DR. HODDER: I think I may be able to clarify something here. First of all, you are proposing that the total committee participate in this executive session, right?

Well, any time that you have a closed meeting, immediately there is a suspicion on the part of some, that material is being brought forth that the public should know. I believe that if you have the full committee participating in this, you have sufficient representation here of Veteran's interests that this suspicion should not be paramount and that the members present on this committee who do represent veteran's interests would be sure to make it known.

DR. CUSTIS: Plus the fact that as Dr. Woodward says, the minutes of the closed session will also be published. Yes?

MS. FARR: Gentlemen, my name is Sandra Farr.

First, I apologize for my appearance. I've been driving from Atlanta all evening. I see a great deal of sympathy that you have toward the Vietnam veterans, but what about the widows and the children left behind? I just lost my husband in June with no insurance policy --, I get no benefits from the VA. I live off of the Social Security check and I have a 4 year old daughter to support. What about us? We have a right to something too. We'd like an education. I sat at home for 4 years and nursed my husband because he couldn't get service-connected to do this, to have the VA

-10-

call me the day I buried him and say, can we deliver the hospital bed you requested? I think the process is a little too slow. I have a daughter that doesn't understand where her father is. I don't have the training or the money to go out and get the training I need to get a good job and I think I'm being treated extremely unfairly by the slowness of the process. I have filed appeals several times over.

--from Atlanta, Georgia -- to try to get service connection benefits. I was turned down on the state level. For some-body that doesn't have anything, I was cut off completely and have been ignored. I have stacks of papers -- the VA here in Washington that say I'm entitled to nothing until I prove service connection. Why do I have to prove service connection? Why can't you prove that its not?

DR. CUSTIS: You know I think all of us listening to you have an empathy for what you're saying. There are avenues to -- are you talking about Agent Orange now?

MS. FARR: Yes, sir, I am.

DR. CUSTIS: Tom?

DR. FITZGERALD: I deal with the Board of Veteran's Appeals. My capacity is representing the American Legion. And this is what we are pursuing, trying to obtain for the veterans a decision as to whether there is any relationship between Agent Orange and the illnesses that the veterans have brought forth as supposedly related to it.

**-**12-

Unfortunately, the law is such that in this country a presumption cannot be made of a relationship, it has to be proven to be definitely related. That is the whole work that we're trying to do here in these committees, to prove that there is some relationship or that there is no relationship. --

MS. FARR: What about our children? We have no place to carry our children for testing.

DR. FITZGERALD: There are laws that are controlling the compensation and the benefits. I would suggest
that you work with your service organizations in Atlanta
to keep you posted as to what you are entitled to at this
point and what we are trying to get for you in the long run.

MS. FARR: The only thing I'm entitled to is to appeal to you on this level. I'm not allowed to appeal on the state level any further. I've appealed -- on the state level.

DR. FITZGERALD: In order to appeal further -MS. FARR: I don't have the money to come to
Washington and stay until --

DR. FITZGERALD: No, I understand your problem and I'm very sympathetic to it, but what I'm trying to bring to you is the realistic facts that govern the situation. In order to come to a secondary appeal before the Board of Veterans' Appeal, you will have to bring forth

more scientific information to confirm your claim. This is the whole purpose of what we're trying to do here, that is to see if there is scientific evidence to support your claim.

If we can get that scientific evidence, then you will be allowed to make a secondary appeal in the future and that's what we're trying to do.

MS. FARR: Is there anyone I can see today who can help me with this? I've brought all the information that has been requested this morning, which is correlation of animal testing of Agent Orange and correlation to what it does to human beings. My husband's autopsy results are astonishingly similar to findings that were found in 1969, '70 and 71 in published books. And a 26 year old man does-n't have a heart the size of 75% of his chest for no reason

DR. SHEPARD: Excuse me, madam. I have a special session at the end of the agenda for questions and answers, but beyond that I will be available to talk to you at the close of the meeting. Ok?

MS. FARR: Yes, sir.

DR. SHEPARD: Thank you. Again, I thank you very much. Does anyone have any comments? I'd like to move on with our prepared agenda now and call on Mr. John Hansen who will give us a brief comment on the recently concluded GAO report. John? Excuse me, by the way, I hope that all members of the committee received their copies and have had

a chance to look at them. You may have some questions concerning the report following John's comments.

MR. HANSEN: Thank you, Dr. Shepard. I appreciated your invitation to come before the committee this morning, to give you a brief summary of the GAO's recent report on VA's Agent Orange examination program. Because of time, I am not going to discuss the whole report, but I will focus on three of VA's Agent Orange related activities. Namely, examinations at VA medical facilities, the computerized Agent Orange registry and VA's efforts to provide veterans with information on Agent Orange and their health.

To assess VA's Agent Orange examination program, we visited 14 VA medical facilities around the country.

There we interviewed about 100 physicians and we reviewed a randomly selected sample of about 1300 examination records. In addition, we obtained veteran's views on the examination program by sending questionnaires to about 1100 randomly selected veterans who were examined during 1980. We had about an 88% response rate to those questionnaires. The majority of the questionnaire respondants were dissatisfied with their Agent Orange exam. Generally, the veterans complained that their exams were not thorough, that they were provided little or no information on Agent Orange and that VA personnel showed little interest in their health.

-14-

Although a comparison of a sample of the questionnaire respondents with their examination records showed the exams to be more thorough than the veterans perceived them to be, our discussions with VA physicians and a review of the exam records at the medical facilities we visited confirmed the veteran's complaints. Only one of the 14 facilities we visited was adequately following VA directives to gather additional information on past or present health problems reported by veterans.

Furthermore, most exam records lacked documentation that a complete medical history was elicited and that all body parts and systems were examined. Only 10% of the medical histories and 36% of the physical exams met VA's own standards for thoroughness. Two factors which may have contributed to this problem are the poor design of the exam forms and a lack of knowledge by some VA physicians conducting the examinations about the potential symptoms of exposure to Agent Orange or the objectives of the exam program itself.

Another factor relating to the examination thoroughness is the lack of a monitoring program to assure the
quality of care provided veterans obtaining Agent Orange
examinations. The VA Central Office had no monitoring program, and environmental physicians at the facilities we
visited were not generally reviewing exam records for

thoroughness, despite VA directives that they do so.

One area in which the VA has made some progress is in reducing the examination backlog. However, as of the end of July, 1982 about 46% of the 172 VA facilities still had more than a one month backlog of examinations. Since January, 1980, the VA spent about \$3 million on the computerized Agent Orange registry. Although the registry was established to determine what health problems Vietnam veterans were experiencing, and to facilitate follow-up contact with those veterans who were examined, it cannot, in its current form, accomplish either objective.

The registry lacks specific information on veterans' health problems. As a result, the registry cannot tell how many cases of chloracne, soft tissue sarcomas or malignancies have been found in veterans examined. Nor can it describe the birth defects reported in veterans' children. Furthermore, VA's Inspector General, concluded that the registry contained inaccurate and unreliable information which compromised its value and integrity.

Because the computerized registry lacked veterans addresses, separate mailing lists had to be developed so the VA could contact those veterans that had been examined. Although the registry's deficiencies could be corrected, the corrections would be costly and the data still could not be used as a basis for scientifically valid

в

conclusions about veterans' health. Discontinuing the registry could save over a million dollars a year. About 80% of the veterans responding to our questionnaire were dissatisfied with the information the VA provided them.

Although VA has prepared informational materials such as pamphlets and videotapes, VA medical facilities we contacted by telephone did not generally offer to send us a pamphlet or tell us the videotape was available for viewing at the hospital. For example, only 24 of 112 VA medical facilities we contacted in our telephone survey, told us that the pamphlet was available at a VA hospital or offered to send us one. This is a franked pamphlet and all that you need to do is put a veteran's name and address on it. In addition, only 2 of the 112 facilities we contacted told us the Agent Orange videotape was available at the facility for them to review.

While VA had not effectively advised veterans of the availability of information materials they had prepared state outreach efforts, on the other hand, have been much more successful in assisting and encouraging veterans to obtain information and an examination from the VA. Although VA established a requirement to provide veterans their examination results in 1981, many of those who were examined before that did not receive their results. We recommended that VA contact veteran's examined before

January 1981 and tell them how to obtain their exam results

if they did not receive them. The VA disagreed

with our recommendation because they felt contacting these

veterans and telling them how to get their exam results

would cause undue alarm.

I would like, for a moment, to address some of VA's comments on our report. In their comments on the draft of our report, which are included in an appendix to the report, and in a more recent Agent Orange status report, which is a report the VA regularly disseminates, the VA has criticized our methodology, analysis and conclusions, suggesting that we used old data, and that the deficiencies we had identified, had long since been corrected However, VA's comments were both inaccurate and misleading. For example, VA said that our report did not reflect corrective actions they had taken, such as the reduction of the exam backlog.

However, on page 15 of our report, we acknowledge the VA has made progress in accomplishing this objective. Furthermore, VA said that our report failed to discuss veterans' expectations of the examination, when we discussed this on page 31 of our report and explained that there is a need for the VA to better inform veterans of the exam's limitations. In fact, this was a recommendation that VA agreed with. VA said that we failed to discuss it in our

report.

. 3

. 4

Although VA says that they have already taken actions to correct deficiencies in the examination program before our report was issued they failed to point out that many of their actions were taken only after they received a draft of the report. In an August 13, 1982 nation-wide conference call, which was one week after they received a draft of our report, and in a September 30, 1982 information letter that was sent to all VA facilities, VA directed its medical facilities to implement many of our recommendations.

VA also disagreed with our recommendation to discontinue the computerized Agent Orange registry and has advised us that they intend to expand the registry. Such a decision should only be made after weighing the answers to several serious questions. How much will it cost to expand the registry? Will VA recode the 97,000 examinations that have already been conducted and are in the registry? What affect will the poor documentation of examination records have on recoding? Will veterans have to be re-examined in order to have their exams recoded and then put into the new expanded registry? And, finally, since VA has made little use of the registry to-date, what use does it intend to make of an expanded registry? I'd be happy to answer any of the committee's questions. Dr. Shepard --

DR. SHEPARD: Do any members of the committee

-19-

2 Lingeman? 3 DR. LINGEMAN: I'd like to ask who the GAO examiners were, the ones who 5 visited the hospitals and examined the hospital records and talked to the physicians and talked to the veterans. 6 What were the qualifications of the examiners? 7 8 9 MR. HANSEN: None of them were physicians. has a medical advisor with whom all our audit tasks 10 were discussed 11 took the standards VA set out in their own circulars, which 12 discussed what the medical histories and the physical ex-13 aminations should cover, including specific systems and 14 specific parts of the body about which examining physicians should 15 gather specific information. When we reviewed 16 the records, we applied the standards that VA, themselves, 17 had developed. We looked to see whether or not the specific 18 medical history and physical exam factors they said should 19 be covered were documented in the medical histories and the 20 physical exams we reviewed. 21 We used a very liberal interpretation of coverage 22 by VA physicians. If there was ever any question as to 23 whether or not a particular item was covered, the physician 24

who did the examination was contacted and the matter was

have any questions or comments on the GAO report? Yes, Dr.

We basically

-20-

25

discussed with him. If there was any doubt, the physician was given credit for covering that item. Furthermore, we discussed these results with the physicians at each of the facilities we visited, as well as with the Chiefs of Staff and the environmental physicians.

We feel that this represents a very conservative view. Every benefit of the doubt was given to the VA physician. The standards that are set out in VA circulars are fairly explicit. All I would think one needs to do to see whether those standards were applied is to be able to read.

DR. SHEPARD: Dr. Fitzgerald?

DR. FITZGERALD: Mr. Hansen, I'd like to pursue Dr. Lingeman's question. You have said that there were no physicians represented but you did have a medical consultant. You did not address the further part of the question as to what were the qualifications of the individuals that were doing this examination?

MR. HANSEN: Well, the qualifications of the individuals was that they were familiar with the standards that the VA said should be met in the examinations.

DR. FITZGERALD: In other words, they knew about the paperwork, but what were their qualifications as far as going into a hospital and examining procedures in hospitals?

MR. HANSEN: Well, I'm not sure what you're

-21-

referring to Dr. Fitz Gerald. We're talking about reviewing the medical records where there are lists of medical history questions, and determining what medical history information was elicited, and whether they elicited the required information, whether veterans reported health problems and whether follow-up questions were asked. A physical exam form lists 21 items at the top and says, describe each of these. All one needs to do is read

DR. FITZGERALD: That's not true, sir. That is not true that all they have to do is read. They have to interpret and that's what I'm getting at. In order for your report to have validity, we have to know about your interpretation and the ability of the individuals to interpret and I think that's what --

MR. HANSEN: Certainly. Dr. FitzGeræld, when there was ever any question about any entry in a medical record, that was not understood, we had the administrative medical records staff and the physicians available to us.

DR. FITZGERALD: May I repeat my question? What were the qualifications of the individuals?

MR. HANSEN: The individuals were GAO auditors.

DR. FITZGERALD: Thank you.

DR. SHEPARD: Any other questions or comments from the committee? Yes?

MR. WALKUP: I think we share some similar concerns. We have for a while. Some of your information, whatever its validity, concurs with some things veterans

have been concerned about for a long time. You are open to the same criticisms that we are, I think, that your report is basically saying no to what's been undertaken and what was attempted was to generate some information about something that people didn't know very much about before. You're telling us all the reasons why it hasn't worked, coming out of your report, do you have any recommendations on how to generate the information that is being tried by the registry? How can we get to the place that you're referring to? --

MR. HANSEN: Well, I think that in order to make a decision on what should be done with the registry,

the VA has to take a serious look at the cost of compiling the registry and the uses it intends to make of it. Unless there is going to be some sort of use of the data in an expanded registry that can justify spending millions more dollars after 3 million have already been spent, I would say that there is no alternative but to discontinue the registry.

I would want to point out that we do not say the VA should stop examining veterans who are concerned about Agent Orange.

On the contrary, we think that that should continue and we

feel that that can be very productive, if the necessary monitoring and quality assurance measures are taken to ensure that the exams are thorough and timely.

DR. SHEPARD: Dr. Hodder?

DR. HODDER: Did you check back on the exams and identify people with illnesses and then go back and see whether those were missed?

MR. HANSEN: I'm sorry, I don't understand the question, to see whether they were missed?

DR. HODDER: In other words, if you found that veterans who had actual complaints, who had had the exams and physical abnormalities and yet those were not picked up by the exams. Did you find that out?

MR. HANSEN: No, we didn't question whether or not the physician detected or missed a particular health problem in a veteran.

DR. HODDER: Because I think the thing that both Dr. FitzGerald and Lingeman were getting at is that there are two ways of looking at the quality of medical care. One is process and one is outcome. Physicians, particularly in physical exam situations, they're recording a large volume of predominantly negative information and hence, take short-cuts. And, if you evaluate the process of how good at recording they are, I can almost guarantee you before you start that you're going to have a very poor result.

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

The real question is the outcome. When I looked at this, did I find real things missed? Having done service physicals, 80 a day, etc., you develop a shorthand of your own. I think the real question is, do I pick up everything I should pick up? I don't know that I can use an auditor's evaluation of how complete a medical record is filled out as a valid way of looking at the accuracy of the health care.

MR. HANSEN: I think its important to note, Dr. Hodder, that we did have physicians at 4 of the facilities we visited who admitted to us they did not elicit a complete medical history from the veteran. By the same token, because of the point that you made in doing a physical examination with a lot of factors to cover, many negative items would not be caught. We focused on cases where the medical record indicated that the veteran reported a past or a present health problem. The VA directives that were sent out were very specific in the information that was to be gathered in those cases and there were four particular areas that they were supposed to explore. In two of those, only 55% of the health problems indicated in the record had any coverage and the other two, it was only a third. And that was our primary focus as far as the thoroughness question was concerned. Cases where veterans reported physical problems and the directives that the physicians were

provided indicated that it was important to gather additional information on these questions, rather than just the longer list. As far as abbreviations are concerned, we did have, again, access to all the physicians. We did have medical abbreviation lists. We had medical administrative staff working with us at each of these facilities. If there was any question or something we didn't understand, we went to whomever we needed to go to to get an answer. We'd go all the way back to the physicians, if necessary, and, in many cases, it was.

DR. HODDER: I guess I would sum it up by saying that, to me, what the result has done is suggest that it may be a problem. I don't think its confirmed the problem. Its like starting a hypothesis again. Now you would have to go back and start with known illnesses and see if those are, in fact, missed. I think you've documented a process problem and I would have to look to an outcome problem.

DR. SHEPARD: Any other comments or questions?

I just would point out that we continue to deal with the GAO report. I thought it was important to bring it cut at this meeting for the sake of the members of the committee, to afford them the opportunity to comment on it. I do feel that if the study would have been done in the manner which I originally suggested, that is that two groups of individuals be

-26-

examined, those examined early in the process, where

information and directives are going to be relatively fresh and compare it to a group that were more recently examined, we might have had the opportunity to see if an improving trend

Unfortunately, that suggestion was not taken. I think that that is unfortunate. We have a report that is based largely on information that was gathered in the relatively early stages of our Agent Orange Registry.

Point number two, we've taken very seriously the

We have decided not to concur with that recommendation and I'd also like to comment on the term that John has used in the matter of expanding the registry. I think that's a little misleading, particularly when he says that going to cost a lot more. My view is that the registry process, that's the process in which we will automate the information which flows from the examination process, will be streamlined, will be brought to more useful information. But, the encoding process will be much more streamlined, so in my view, we ought to see a decrease in cost. I don't know, that's just a hunch and obviously, we won't know that until we get the process underway. But, I think its probably not valid to make the assumption that if we continue the

registry, its going to cost more money than it has cost in the past. I view the automated portion of the registry as very important and to that end, we've been working very hard in streamlining it and making it a more useful effort. And on that point, I'm happy to announce that the revised registry process is now in the hands of OMB for review and we are hoping very much to get it out in the field before too long.

The other part of John's concern about our address list, we have now sent out the follow-up circular that was disseminated in August of this year, in which we will develop an automated mailing list and we'll also send out brief health questionnaires. So, in the next few months, we'll have what we think is good, valid information regarding the current health status of veterans who have been in the registry since its inception. I think that will give us some information in terms of what the progress of the health of the veterans in the registry has been since their initial examination.

DR. LINGEMAN: Dr. Shepard, I believe that the Registry should be continued.

We need some record in the central office for keeping a handle on diseases occurring in this group. For example, do we have any soft tissue sarcomas

in the Registry? Those questions could not be answered without some sort of Registry. The Registry could be made more

20

21

22

23

24

25

BAYOMKE, 8 useable.

MR. HANSEN: Dr. Lingeman,

the registry wouldn't tell you how many soft tissue sarcomas occurred in veterans. In fact, the registry doesn't even tell you how many people have benign or malignant tumors.

DR. LINGEMAN: There is some information to be gained. I think if there have been a lot of soft tissue sarcomas, I think some of them would have appeared in the Registry records.

MR. HANSEN: There's no way for them to get in, Dr. Lingeman. That's precisely the point we're trying to I think its also important to point out that when VA went back and looked at the incidences of neoplasia reported in the registry, three out of every four entries in there were wrong.

DR. LINGEMAN: Then this needs to be corrected.

But I know of no other way to keep track, of diseases occurring in this group of veterans.

MR. HANSEN: As I pointed out, I think any decision on expanding, revising, continuing the registry need to be made based on very careful cost-benefit analysis, unless there are specific uses that are going to be made of it to justify the cost, we would recommend that it be discontinued.

DR. LINGEMAN: I think it was probably conceived and implemented in haste because of accusations that the

1 VA was not doing anything. Now the VA is doing something 2 and I think it can be improved. 3 I know of no other way to do this to accomplish the job The GAO has made its recommendation on how this be the Registry could be improved. MR. HANSEN: Well, our recommendation was to discontinue the registry because, although the problems could 7 8 be corrected, there was no demonstrated use of the informa-9 tion. DR. LINGEMAN: How 10 else will the information from the VA hospitals 11 who examine these veterans get back into a central information system? MR. HANSEN: What is going to be done with the 12 information? That's the question. 13 DR. LINGEMAN: Well, you need to know what diseases 14 are occurring in these veterans as they are observed. MR. HANSEN: We've been told by this panel and 15 others that the information in the registry is not adequate 18 because its a self-selected sample 17 which cannot be used for scientifically valid conclusions. 18 DR. LINGEMAN: It can be improved and it can be 19 made useful. 20 MR. HANSEN: I don't disagree that corrections 21 could be made in the registry. Its just a question of --22 23 Well, since in the registry in its 24 current form most cases would require that anyone wanting 25

~30~

an's medical record anyway, it would seem to me that the most important thing is that you have a method of contacting the veteran and being able to locate his medical record at the hospital. You don't need an elaborate registry with a lot of health and service information in it to be able to say that a particular individual was examined at this facility.

DR. SHEPARD: I think we'll have to move on.

I think its been a useful discussion and I would like now
to call on Dr. Betty Fischmann, who is the Chair of our
Chloracne Task Force, to give us a report of her committee's
activities.

DR. FISCHMANN: The newly reconstituted Chloracne Task Force of the Veterans Administration has the Chair-

person directly responsible to the Director, Agent Orange
Projects Office. Dr. Lawrence Hobson
! of Central Office, Clinical

Assistant to Dr. Shepard will render assistance in initiating any of the goals of the task force.

There are three standing task force members and two new members.

In addition, a program anal-

yst, based at the Washington VA
Medical Center, works full-time with the task force.
Funding comes from Central Office and is current-

ly \$55,000 divided for medical, housing and travel funds

for special examinations of veterans with possible chloracne, salary for the program analyst, and supplies.

The Chairperson reports formally to the Director quarterly and informally as necessary. The program analyst reports weekly to an administration assistant of the Director. The task force will provide an analysis annually to Agent Orange Projects Office of Special examinations for veterans with possible chloracne. The VA Chief Medical Director, Dr. Donald Custis, has given the task force members the following seven goals, tentatively identified as primary activities:

Task Force goal number one: To hold an initial meeting of the reconstituted task force and to conduct appropriately scheduled future meetings. The first meeting will be in New Orleans at the VA Medical Center on Monday, December 6, 1982, during the American Academy of Dermatology Annual Meeting. Subsequent meetings will be held at American Academy of Dermatology Annual Meetings. A second meeting will be held each spring at the annual meeting of the American Federation of Clinical Research, Washington, D. C.

Goal number two: Identification of additional VA

physicians to act as dermatology consultants. There are 24

full-time dermatologists in the 172 VA medical centers and
29 part-time dermatologists.

The cooperation of all 24 full-time and some

part-time dermatologists will be requested as there are 28

-32-

T

medical districts in the VA medical system. Each consultant's duties will be detailed at the first Task Force meeting and will probably involve responsibility for dermatologic examinations of Agent Orange registry veterans, sending copies of examinations to the Task Force, updating procedures as required, advising the Task Force of problem areas, reviewing cases of skin diseases to determine veterans requiring special examination, maintaining close cooperation with the hospital environmental physician, checking that veterans have seen the Agent Orange video tape, are aware of Public Law 97-72, have had a rating for their skin problem and are notified in person and in writing of the dermatologic examination.

view of rating decision sheets provided by the Central
Office, Compensation and Pension Service (CPS) to determine
possible chloracne cases and recommend selected claimants
for special dermatologic examination. To date this ongoing
review has been done locally here in Washington, D. C. The
CPS forwards any ratings where skin disease is claimed for
Agent Orange exposure. The review involves three steps:
Step one: the rating decision — sheets and, where these are not
clear, claims
folders are separated by a physician into two groups; (a) cases
with any, even slight, possibility of chloracne,
(b) cases
with no possibility, such as clear cut warts. Step two:

-33-

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the claims folders, including compensation, medical and dermatologic examinations in possible chloracne cases are reviewed by a dermatologist familiar with the clinical history and diagnosis of chloracne. The dermatologist divides these cases into those where chloracne is not diagnosable and those where chloracne is likely enough to warrant a more detailed examination.

Step three: veterans with chloracne are offered a special examination by an internist and a dermatologist at one of 3 or 4 outstanding private clinics in the United States of America. The clinic selected will be the one closest to the veteran's residence. The cost of transporting, examination, accommodations and meals will be paid from Task Force funding. The program analyst sets up clinic appointments, transportation, accommodations and disbursement of funds to the veterans and clinics. To date, of 3,200 claimants, 13 have possible chloracne, review of cases is ongoing. Of the 13 veterans, we have been unable to locate 4. Their registered letters came back with no known address. Presently, their Congressional representatives and veterans' groups are trying to locate them. Of the remaining 9, 7 have completed their special examination this month and we await the clinic's report.

Goal number four: provide an analysis annually to the Agent Orange Projects Office of the special

-34-

1

2

3

5

examinations. The format for this analysis will be evolved at the first Task Force meeting.

Goal number five: review and analyze Agent Orange Registry data relating to types of skin conditions being reported by registrants.

Agent Orange data are retained in the medical record of the Vietnam veteran at the examining hospital. Approximately 100,000 Agent Orange examinations have been performed. A spot check of three major hospitals shows wide varia+ tion in the numbers of examinations: Texas VA. 3,000, a Northern California group: 867, 1876 and 253 (The 1876 was felt to reflect the effect of the outreach program in that hospital's area; a. Southern VA saw 897 and an East Coast VA 190. The number referred to dermatologists is up to the judgment of the examining physician. Southern California VA has 897 exams and 893 were seen by a dermatologist at their request. At none of the 5 hospitals were any of those exams done only by the environmental physician, but by a larger group of out-patient divisions.

A major problem in the East Coast hospital is the large number of veterans who failed to show for their examinations. For example, in 1981, 695 veterans were scheduled and 540 failed to show.

Data transferred from these examinations to central computer gives total number of claims per month and divides them into claims with diagnosis confirmed,

with diagnosis not confirmed, and no disability alleged.

It will therefore be necessary for the Task Force to evolve a system by computer or hand check to analyze the Agent Orange Registry examinations in the medical files.

Goal number six: provide support in the development of a protocol for the diagnosis of chloracne and other possible skin conditions related to herbicide exposure.

Two Task Force members are currently reviewing chloracne literature and will report in New Orleans. A provisional questionnaire has been sent to Task Force members to formulate a detailed protocol for diagnosis of chloracne and other skin problems. The protocol will be forwarded to all environmental physicians and dermatological consultants. Thus, there will be comparable examinations for analysis and computerization.

The examination will incorporate new findings and old confirmed by the 3rd International Symposium on Chlorinated Dioxin and Related Compounds in Salzburg, Austria, October 12-14, 1982. New and confirmed findings are:

1) Chloracne may persist in 25 to 50% of cases, up to 30 years, as shown by the longest follow-up to date of an industrial accident. It was previously believed it cleared in a few years. 2) Porphyria cutanea tarda may result from low chronic exposure to dioxin as could have occurred in some Vietnam veterans. Therefore, screening of urine,

stool and any liver biopsy tissue will be done for porphyrins.

3) Hirsutism of the face and hyperpigmentation may be due to porphyria cutanea tarda. 4) Solar elastosis may have an accelerated onset, increased frequency and severity. 5) Skin cancer was statistically significantly increased in exposed Finnish workers. There was no trend for higher mortality in higher exposed groups. Skin cancer will be specially checked.

Dioxin is a co-carcinogen or promoter not a carcinogen in animal experiments. Therefore, veterans who were exposed to Agent Orange and are heavy users of tobacco which is a known carcinogen, or who are subsequently exposed to carcinogens at work or elsewhere shall be followed closely.

7) Dioxin persists in soil mostly in the top 8 cms. and down to 15 cms. Veterans who cleared herbicide foliage and this top soil from the sides of highways in Vietnam to prevent ambush, must be carefully screened and followed. 8) Atherosclerosis may be accelerated. Therefore, skin will be checked for Xanthoma.

Goal number seven: serve as a resource in the development of a monograph on chloracne. To ensure excellence of the monograph, leading national and international figures in the field of chloracne will be approached to

contribute to the monograph as will be determined at the Task Force meeting.

In conclusion, the major focus of the Chloracne Task Force will be to resolve the health care issue of chloracne in the near future. Systemic toxicity rarely occurs in the absence of chloracne. Resolving the issue of chloracne can only be done by the above outlined aggressive, continually updated approach to locate veterans who may have had and still have chloracne. This is the group at risk from systemic absorption of the most toxic material ever synthesized by man. It is, therefore, the group of Vietnam veterans whose health must be monitored indefinitely. Thank you, Mr. Chairman.

DR. SHEPARD: Thank you very much, Dr. Fischmann.

I think you'll all agree that Dr. Fischmann's Task Force
has really taken on an ambitious program and we look to the
future for some very interesting results. Are there any
questions for Dr. Fischmann? Dr. FitzGerald?

DR. FITZGERALD: Dr. Fischmann, do you anticipate that you will require many skin biopsies?

DR. FISCHMANN:

We are requesting all

the special examinations have skin biopsies done. At

my own hospital, we are currently doing biopsies on any

possible chloracne. The recent meeting brought up several

suggestions that there may be ways to diagnose it by

that there are certain features which may be present -- for one. So, we are going to set up a look at histology to see if it is possible to diagnose it by histology.

DR. FITZGERALD: That is the information that has been brought to this panel previously. Are you going to have a central point to which biopsies will be referred?

DR. FISCHMANN: Yes, we will be requesting copies of biopsies go to the Armed Forces Institute of Pathology to Dr. Irey.

DR. SHEPARD: Are there any other questions for Dr. Fischmann? Thank you very much. I'd like to now call on Mr. Peter Currier from AMVETS to give us his report. I apologize for the temperature. I understand they are trying to do something about it. We're in that in between season.

MR. CURRIER: I think has to do with your being from Maine also. Mr. Chairman, members of the committee, we appreciate the opportunity to appear before you My comments will be brief. They center around our concerns about recent developments and developments of the past. There has been much talk recently about the transfer of the responsibility for the study of Agent Orange and, on an ongoing basis, much talk about lamenting over the difficulty of the identification of the Vietnam veteran by

the Department of Defense and the Veterans Administration, among others. We, like other veterans organizations distribute information and consistently urge those who approach our field offices, posts, Departments, and National Headquarters to seek the examination as a means of determining any on going health problems and confirmation of any problems relating to Agent Orange.

Our concerns are that the Veterans Administration retain responsibility for the examination process because we feel that it is the only agency which is able to control the examination process. If this were left to the private sector, we feel there would be no mechanism for regulating examinations. We also feel that the mechanism for the identification of the Vietnam veteran has been with us for a number of years with the examination procedure. The Vietnam veterans in Veterans Administration Medical Centers regularly are hospitalized and sent home only to find in the newspaper an article about the Agent Orange issue, whereupon they pick up the telephone and request of the Veterans Administration an Agent Orange exam. We know personally of individuals who have done this, traveled back to their home, some 400 miles from the VA Medical Center and then are paid to come back to the Veterans Administration Medical Center and receive the examination. We think that this is somewhat illogical, and would urge the

Veterans Administration through this committee that upon entering a VA Medical Center, veterans be queried as to their participation in the Vietnam Conflict and be given Agent Orange pamphlets and asked to take the exam while hospitalized.

This we feel would add to the process of identifying the Vietnam veteran as well a giving him some piece of mind and avoiding the outlay of travel funds by the Veterans Administration over the long haul. We also feel that there should be some greater emphasis on the examination procedure itself by the Veterans Administration. Not necessarily by Central Office, but particularly at the local level.

We feel that, having canvassed our field offices, a greater emphasis should be made on an effort to accomodate Vietnam veterans who, but for work schedules, would take the exams. These individuals are unable to come in during business hours and would prefer to receive the examination either on an evening or during the weekend basis. We think that this is a great barrier to the number of exams that have been conducted, and we do not feel that this would overload the Veterans Administration system as have been the fears of some of the local VA Medical Center Directors.

We also feel that there needs to be a serious

consideration given to the overall anxiety on the part of the Vietnam veterans about the issue as relates to the claims procedure. We feel there are some veterans (we've heard of a few) who are considering filing claims for anxiety based on the Agent Orange issue and also that if not now this will become a reality in the future. We would hope that the Veterans Administration would exercise it's authority to encourage the Vietnam veterans to come forward, No. 1, and No. 2 to accommodate them by weekend and evening examinations. We feel this will aid in the identification of the Vietnam veteran and the provision of a ready roster for follow-up procedures and should be added to the registry which by the way we have heard much talk about. AMVETS is deeply concerned however that the registry process be maintained.

DR. SHEPARD: Thank you very much, Peter. Are there any questions or comments from the committee? I would just add that we now have in place a Vietnam service indicator in the Patient Treatment File, on the patient data card, that is the embossed plastic card that is issued to each veteran as he comes in for either an out-patient or in-patient visit and, in the last few months, that card has the Vietnam service indicated on it. Those of you who are familiar with those cards, the number 7 appears indicative of somebody who served during the Vietnam era. After the 7,

there now appears the letter V for anybody who actually served in the country. So, gradually, we are establishing various processes for identifying veterans who come into our VA medical centers' outpatient clinics as to whether or not they actually served in Vietnam. Hopefully, that process will enable us to make better use of the Patient Treatment File and begin to get a handle on what illneses are being experienced by the Vietnam veterans and then comparing them between those who actually served in Vietnam and those who did not. Thank you very much, Peter. I'd now like to move on and ask that Major Alvin Young, who is on detail with us from the Air Force, present an update on the status of the Air Force Health Study and give us some information that came from the Salzburg conference he attended in October.

MAJOR YOUNG: Let me start first with the literature issues. Not wanting to plug the Air Force, but we do have a new book out; it's called "Operation Ranch Hand, The Air Force and Herbicides in Southeast Asia". It's a historical document prepared by Bill Buckingham of the Air Force Academy. I have a flier available back on the back table so, if you are interested in the Ranch Hand program in Vietnam, the historical point of view, please order that. It's expensive, \$8.50.

There is word of the 1981 Dioxin Symposium

publication. I've been telling you all along that that publication was forthcoming. Well, Plenum Press has finally got into gear and the publication is to be released the 7th of January. It's about a 600 page book on the latest knowledge we have of the chlorodibenzo-p-dioxins. A number of health studies, environmental studies, and exposure studies are in back. It will be coming out at around the first of the year.

The 1982 International Symposium on Dioxins and Related Compounds was, of course, held in Salzburg, Austria Dr. Fischmann has already alluded to some of the information on chloracne that came out of that. I have prepared the ? abstracts on the lectures of epidemiology for a handout. 40 more copies of the handout will be available in a couple moments in the back of the room for those that did not get it. Let me just say that there are industrial studies that are in England reported in here, Both the studies and one by Dr. Suskind for Nitro, West Virginia really provide us little more than the knowledge that Dr. Fischmann discussed about chloracne. We still don't get any indication of increased mortality, heart disease or cancer. So those issues have not been resolved. Industrial populations are quite small. The Air Force did talk about their mortality study at Salzburg and I'll mention it in a few moments in the up-date. Dr. V. Mikingki from Finland talked

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

about a study of some 1926 men who had sprayed 2-4-D and 2-4-5-D in Finland. He saw no increase in cancers of a variety of types including the soft tissue sarcoma. The issue of skin cancer was brought up by Riihiamki and that really remains to be determined, but Riihimaki was concerned about skin cancer.

Dr. Alan Smith from New Zealand presented a poster session and I don't have the abstract for you here, but New Zealand scientists have been working on the soft tissue sarcoma issue for people who have handled routinely 2,4,5-T in New Zealand. That study has shown nothing at this time. I'm sure many of you are aware that the state of New York is conducting a soft tissue sarcoma study and some of the information on it is available in the Report to the Governor and Legislature, 1982.

So, although we didn't get any answers on soft tissue sarcoma, a number of large studies are underway.

After I left Salzburg, I did have a chance to go to Denmark and to talk with the Danish Cancer Registry scientists over a very large study currently underway in Denmark. The Danes for many years, since 1947, have used large quantities of the herbicide 2-4-D and MCPA, which is methyl-chlorophenoxy acetic acid. Neither of these herbicides contain the 2,3,7,8-TCCD, the dioxin. But there has been a lot of allegations about 2,4-D the other half of Agent Orange. The Danish study is

-45~

important because it is of 3500 people. Some 1800 who were heavily exposed during the years of herbicide production. There are 1700 people, who act as controls, that work in the business side of the herbicide-producing company. The Danish Cancer Registry is one of the oldest, most complete registries in the world. The study, then, will be looking at the issue of cancer in a population of individuals who worked with 2,4-D and MCPA. There are excellent records and that's the beauty of this study, good exposure data and excellent records on the people. That study should be out in the next year.

From Copenhagen I went to Amsterdam and met with Dutch scientists and looked at the study they have underway. They are currently working on a morbidity and mortality study of some 400 workers that since 1946 have worked and actually sprayed 2,4,5-T herbicide that does contain the TCDD. In the Netherlands, one of the big problems is a shrub that's very much like blackberrrys and these 400 individuals have had the responsibility of controlling this blackberry-type of bush for the past 25 years. It's one of those situations that was literally a job passed from father to son and so we have a very interesting population that the Dutch are studying. What we are saying is that the answers that we are seeking will probably come from a lot of little studies that are ongoing. I

wish we could say that all the studies were done. The Dutch have released one small part of that study and a flier, that I did put on the back table, talks about a scientific issue. The Dutch and the man that's responsible for some of the best work in the world on prophyrins is Dr. Strik. I met with him and he pointed out that in this case they have not seen a relationship of prophyrins to 2,4,5-T exposure. Recently, we've heard a lot of talk about the work of Dr. Cadario in Philadelphia. Dr. Strik who has been in contact with Dr. Cadario is of a different opinion about the impact of 2,4,5-T and dioxins on prophyrin metabolism. So, be aware that there is still a controversy about prophyrin metabolism.

I did have a chance to meet with a number of Italian scientists and I'd like to just take a moment to tell you a little bit about the frustration of Italians over the epidemiologic work at Seveso. Many of us had hoped that the Seveso accident, and all the ongoing studies since 1976, would give us an indication about dioxins and what to expect, what to monitor for in the population. I'm sorry to say, that it's been very disappointing for the Italians as well as for us. The problem has been, as you might suspect, the lack of support in trying to conduct long-term comprehensive studies.

Let me just go into some of the things they have

found. For example, they pointed out that they knew that TCDD was released in the accident, and they know about how much of the TCDD was released. In terms of population exposure, unfortunately, it was very patchy in terms of time of accident and distribution of TCDD and where the people were located. The population's mobility has impacted the study because of lack of definitive information on the population mainly during the first two weeks after July 10, 1976. Because of that, the Italians do not have good records on who were exposed and how much were they exposed.

In terms of markers of exposure seen during the last 6 years, they conclude that there may be some unknown dose related effects, but chloracne is the only marker they have consistently found. As to acute and short-term effects that have been monitored, it's resulted in too broad a spectrum of biochemical and clinical symptoms, and thus is no more than a sum of inconsistent information collected. They simply have not seen consistent information. For example, the issue of nerve conduction, they see some indication, but it's too inconsistent because of the small population size and the measure of exposure.

Their clinical and epidemiologic baseline data, i.e., what did they have prior to the Seveso accident, have been the big proglems with monitoring birth defects. They had very little good data on hand with which to compare any

increase, thus they simply have not been able to make any reliable conclusions. In terms of the health care structures, and the resources, they point out that they are materially sufficient, but there is scarce readiness to cooperate. And they have no epidemiologic tradition in Italy for such types of studies. Doesn't it sound familiar? of the comments they did make that was interesting, and an issue now, is whether to continue with the monitoring (epidemiologically) in Seveso. The question remains whether the "don't worry, we always thought it would go like this" approach will prevail or the official, "go on, please try harder to obtain better coordination and compliance" position of the International Steering Committee and of the epidemiologic team. They further point out, based on evidence derived from prolonged, direct work in the field, repeated personal experiences, international meetings and critical readings of the published literature, the most serious consideration must be given to implications of this difference in attitude. The Italians are trying to decide whether to continue the epidemiologic studies. There's a very high cost in terms of dollars. They're questioning whether to put those dollars out and what kind of information would come from putting those dollars out.

So, its a rather dismal picture, I think, of what's happening now in terms of the epidemiologic studies

in Italy. I did meet with some of the English scientists and they have quite a number of studies in England going on but nothing concrete at this time.

On to the Air Force report. I have been asked by Colonel Brown to present to you the up-date of the Ranch Hand report, where we are with respect to the Ranch Hand epidemiologic study. I have asked for 40 additional copies of the up-date to be delivered here in a couple of minutes so that those of you who do not have a copy, we'll have one for you in a few minutes.

The following information is an up-date on the progress of the Air Force epidemiologic study of its Ranch Hand personnel exposed to herbicides in Vietnam, from 1962 to 1971. The study protocol was developed in 1979 for an in-depth epidemiologic investigation consisting of three integrated elements: the mortality study (death); a morbidity study (diseases, including birth defects in offspring). Some of you have asked about, what does the Ranch Hand study include? It does include that. And 3) a follow-up. The protocol was subjected to extensive peer review during the 1979 and 1980 period. Final approval for the study was given in the fall of 1980 and the work was begun on the study.

The initial mortality phase of the study is nearing completion at this time. As of December 31, 1981, 60

Ranch Hand deaths had been reported with full documentation
for each. We're talking about a population here of about

1260. 22 were killed in action; 18 accidental deaths; 3

suicides; 1 homicide; 2 malignant neoplasms; 1 endocrine, nutritional, metabolic and immunity disorder; 9 having diseases of the circulatory system and 4 having diseases of the digestive system. These are the positives related to death now. The School of Aerospace Medicine at Brooks Air Force Base in Texas has heard of 7 more deaths for which they are now in the process of obtaining additional information. Data collection for this study continues on a daily basis. Although more extensive analyses and comparisons remain to be done, preliminary findings indicate that the overall crude mortality of the Ranch Hand and comparison groups have been very similar. Based on the deaths identified, excluding the 22 killed in action, no statistically significant differences in total death rates have been found between the Ranch Hand group and the comparison group. Both groups appear to have experienced significantly less mortality than a similarly aged U. S. white male population, indicating a healthy worker effect. I always knew Air Force people were in good shape. However, thus far, very few deaths have occurred in the study group, and these deaths represent only a very early assessment of mortality. The only preliminary interpretation that can be made from these data is that, thus far, the Ranch Hand group has had a mortality experience equivalent to that of an occupationally similar comparison group. Periodic reassessments of

the mortality experience of the groups will be made. Definitive conclusions must await the completion of the more detailed analyses and the accumulation of a larger number of deaths in the study groups in the coming years.

On September 18, 1981, Lou Harris and Associates were awarded a contract to administer the face-to-face, in-home questionnaires to the participants selected for this phase of the study. Of the original 2,486 subjects selected for this study, only one Ranch Hand and 4 comparison subjects could not be located. This location rate of 99.8% is very high, as you know, for an epidemiologic study. Interviews were also planned with the current and former wives of the subjects and with the next-of-kin of deceased individuals. These interviews were begun in October 1981, and terminated November 15, 1982. At the completion of the contract, November 15, 1982, 2,665 study subjects, 2700 current and former spouses, and 75 next-of-kin interviews had been accomplished.

The participation of the subjects has been very gratifying. 97%, 1,170, of the Ranch Hand subjects chose to participate in the questionnaire. 3%, 38, declined to participate in the questionnaire. As expected, comparison subjects participated at slightly lower rates, 92%, 1,495, of the selected comparison subjects completing the questionnaire phase of the study. All comparison subjects

declining the questionnaire and/or the examination have been or will be replaced with willing subjects, equally well qualified for inclusion in the study. These substitute subjects will all be interviewed and examined in the same manner as other participants. This circumstance was anticipated in the study design, and provisions for the substitution were planned in the early days of the effort. This substitution process will ensure that the largest numerical set of data are available for maximum scientific validity.

The physical examination phase of the study is proceeding well. On November 25, 1981, the Kelsey-Seybold Clinic in Houston, Texas, was awarded the contract to conduct in-depth physical examinations and psychological evaluations of the participants. The examinations began on January 12, 1982. As of November 24, last week, 2,153 examinations had been completed on 1,020 Ranch Hands and 1,133 comparison subjects. There are 137 examinations yet to be accomplished. The physical examination contract is scheduled to terminate on December 15, in a couple weeks, so that those 137 are now scheduled or are being examined

between now and the middle of next month, December. Every effort will be made to accommodate all the individuals desiring to participate in the study. Each subject will thus be given the maximum opportunity to participate fully in this effort.

One problem due to a computer programming error has arisen since last year and it has been successfully resolved. Eighteen percent of the comparison subjects initially selected from computerized personnel records for the questionnaire and examination phases of the study were found to be inappropriate for inclusion in the effort.

Many of

these individuals had already been interviewed and some had even been examined. All of these individuals were advised of the error and thanked for their assistance. Those who had not already been examined were offered a careful and complete physical examination at the Air Force expense at the Air Force medical treatment facility nearest their home. Other more appropriate subjects were entered into the study in their place. This over-selection, then, of controls did not affect the scientific validity of the study.

The next 7 months will continue to be very active. The contract for physical examinations will conclude in December, and interim technical reports will be issued in early 1983. A mortality report will be released in March, and preliminary reports on the data from the questionnaire and examination phase of the study will be available in the April-June time frame next year.

The initial round of questionnaires and physicals

-55**-**

will be the basis for the remainder of the study. Followup examinations will be administered to the study subjects
at the 3, 5, 10, 15 and 20 year points. Last week the Air
Force School of Aerospace Medicine released to the public Air Force
Technical Report-TR-82-44, "Epidemiologic Investigations
of Health Effects in Air Force Personnel Following Exposure
to Herbicides: Baseline Questionnaires". The questionnaires
presented in the technical report are the field instruments
used for the baseline data collection effort of 1981-82.
The Air Force promised to release the instruments upon
completion of the questionnaire phase. They have done so.
This is available to the public for dissemination.

In summary, this study is preceeding only slightly behind schedule. But please note that this is due to the unexpectedly high and favorable participation rates, the eligibility problems and unique logistical and scheduling difficulties encountered in a study of this scope. The Air Force investigators look forward to continuing their association with the Veterans' Administration in their study efforts. Submitted by: Lt. Col. Phillip Brown, Office of the Air Force Surgeon General, Bolling Air Force Base, Washington.

DR. SHEPARD: Thank you, Al. I think the excellence of this study attests to the dedicated team of investigators located in San Antonio, Col. George Lathrop

Ş.

Б

and his associates who have done a marvelous job and are to be commended on their efforts and we have certainly enjoyed the close working relationship with this outstanding group of investigators. I would now like to call on Mr. Robert Santos, who will represent the State Agent Orange organizations. We are very happy to have you all with us today.

MR. SANTOS: Good morning and thank you very much My name is Robert Santos. I am from the New York State Temporary Commission on Dioxin Exposure. I am the spokesperson for a number of commissions which are also here today with me and they are: Oklahoma, New Jersey, Illinois, West Virginia, Pennsylvania and Texas. A number of the other states that expressed interest in joining us, but were unable to make it due to transportation as well as scheduling difficulties. I'd like to point out that this is the second meeting that we have had. The first one being held in early October, and we are planning to continue to do this on a periodic basis in other locations.

And for those of you who are not familiar with the state commissions, I'd like to take a few moments just to explain our make-up and where we're coming from. The states presently active in this area range from Hawaii to Maine, from Georgia to New York — There is Wisconsin, California, Kansas, Ohic, Hawaii, Connecticut, Massachusetts, Maine, Texas, Pennsylvania and the ones I mentioned earlier.

As you can tell, we're not limited to any geographical area. We're not limited to any industrial base.

We are basically representing veterans throughout the nation. The reason for us being created, which was started about 3 years ago, -- New Jersey was the first state commission to be created -- was obviously as a result of dissatisfaction among the veteran population as well as the workers in our respective states, who may have been exposed to dioxin through manufacture, transport, or possibly accident. And it was dissatisfaction amongst this population which was recognized by the respective state legislatures, that certain activities being conducted either by the federal government or the private sector or the legal circles, was not proceeding adequately or in a timely fashion.

As a result, they created these fact finding bodies and our job mainly is to go out and address these certain issues objectively. The membership of the respective commissions varies from people who are just concerned citizens to doctors, lawyers, scientists, elected officials, members of the state governments, membership in the respective scientific circles - health departments, public health departments, hospitals as well as I said, membership in veterans' groups and other types of groups including unions.

The reason we came together as a group is that for the past 2 years we have been struggling with certain

1

issues. As itenoted earlier, you have been struggling for 5 years over the same issues. The veterans have been struggling for approximately 10 years over the same issues, and we felt that it was time we all got together.

Being disbursed has advantages as well as a disadvantages.
Although
getting together is difficult, we

know we represent a cross-section of the nation, and that
the respective expertise located throughout the commissions
together is an incredible array of personnel.

What we're doing now is trying to share our knowledge with each other.

Some of the people in this room we've seen testify for us at our hearings. We have done much as a We conducted hearings, we received oral testimony, as well as written testimony from both representatives of the VA as well as the private sector, both veterans, themselves and independents. We are in the process of having varied programs. Current programs are facilitating the referral of veterans to the Veterans' Administheir examinations. Others are faciltration for itating the referrals of veterans to other types of organizations that might be able to deal with other issues that can't be addressed at this point. We are conducting public service announcements throughout the states as well as

eventually throughout the nation regarding this issue.

There are 800 numbers that are being utilized now to reach out to veterans. So we can possibly be a resource down the line to anyone working on these issues in a concerted effort.

We will never forget the fact that we were created of or a very specific purpose, out of dissatisfaction as well as a mandate to address this objectively. So, regardless of where the studies go, or where the money goes, we are doing the work, we will always serve as a basis for criticism as well as a focus of energy to reach out to veterans.

To that extent, we have issued collectively a number of reports -- we are encouraging other states to go out and create their own programs to address these issues. We are coming here today, we met yesterday and we'd like you to know that we realize that this is an Advisory group

We have heard, you know we all do at times, that advisory groups advise, they do not set policy. Well, we are not ignorant in that policy makers go to advisory groups and ask them for their information, ask them for their advice. We're not naive to think that people who sit on advisory groups do not expect to be listened to and do not expect to be heard. So, we're addressing you on both a personal and professional basis and we have decided amongst ourselves on two basic issues that we'd like to

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

bring out today. I always like to point out at this time that Dr. Anderson is here from Texas state commission who is working on a number of issues from a medical standpoint and we would like him to address this group for the last portion of our allocated time.

But at this point, we would like to address two things. One is the recent reports of the transfer of the study to CDC. We are under the impression that although that transfer has been conducted publically and politically also, as early this morning was mentioned, that we were under the impression that it was not yet official. That it has not yet been transferred officially. We have decided, as a group, that we endorse the transfer of the study to CDC. The issues that we based our decision on are probably the ones you've already heard -- that we don't need to go over. We would like to express two concerns regarding the transfer of the study. One is that autonomy is given to the CDC in terms of developing, implementing the study, and that it is essential that the proper allocation of dollars goes with that responsibility. If they are willing to accept it, then we should give them the money and not tie their hands at the beginning. The second issue is contrary to some stated opinions that the Vietnam experience factors should not be considered at this time. We feel it should be included in this new study conducted by the CDC. It's

out with, whether they be neutral, positive or negative,
whatever way you want to look at it, we feel that the Vietnam experience should also be included because of other
factors that have been raised regarding other types of
chemical exposure involved. And we do not want to
spend a lot of money on one issue and find out that if the
results come out one way, we have to start all over again.

The veterans have waited long enough. Also, we feel that we support the CDC, we feel that they are the most appropriate governmental agency, at this point in time, in the nation to handle this type of study. Although I will not preclude the states from conducting their own independent studies that are ongoing now and it would not preclude the states from focusing on those particular issues in a concerted effort.

The second point I would like to make this morning is that recently a bill has been introduced into the House by Daschle regarding the presumption of compensation based on a presumption of service connection for the disease of soft tissue sarcomas manifested in veterans who served in Vietnam during the Vietnam era. At our meeting yesterday, several states were able to make the decision, voted and those states who had representatives who could not make that decision shared their concern and they will go back to

1

2

3

5

their respective states. But congensus of opinion at the meeting yesterday was that we support that particular bill. We feel that, at this point in time, the presumption of service connection for soft tissue sarcoma should be estab-We will be lobbying within our respective states. We will be lobbying as a group. We feel that it is time that the veterans get something out of this particular issue. It is not simply an emotional piece that we are deciding, we're basing this on recent reports that we have read. We are basing this on a number of studies that have been conducted. We are basing this on expectation that there are some reports that will be coming out shortly that will show a correlation -- and resulting in soft tissue sarcoma. And at that particular junction, we are limiting our support to that particular bill that addresses soft tissue sarcomas. We are not addressing the other issues related to it, although down the road the issues of retroactivity will, I would say, have to be addressed. Again, we are addressing this group in this manner, on only two issues, but at this point in time we feel those are the two we can -- come before you and make our claim.

Also, we will -- down the road again and address other issues. We would like to continue the relationship that we have established individually as well as in terms of our respective states as well as the group, with

the respective administration and the other groups that have come before us and testified and we will encourage that again in the other states to create programs to call on your services to come before us. And I thank you for your very gracious invitation to be here today and we will send you a letter and express our statements again and we would like to have you respond, in writing, to our objections, whether or not you will endorse our recommendations. Now, although I know you are advisors, you still have that power to affect policy and we expect that you do that and we would like you to do it with us. That goneludes my remarks. Dr. Anderson is here from Texas --

DR. FITZGERALD: Mr. Santos, will you amplify what you mean by Vietnam experience?

MR. SANTOS: Yes, that's a terminology that's been floating around. What that infers to, as it is our understanding, is that dioxin was not the only chemical that Vietnam veterans were exposed to. There were a number of things that we were exposed to. I am a Vietnam veteran and I don't know what we were exposed to, but perhaps some people in the room have an inkling and if we put them all together we'd have a bunch.

DR. FITZGERALD: In other words, what you're saying is you'd like other chemicals that Vietnam veterans were potential exposures to be included in this?

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. SANTOS: Yes, yes.

DR. LINGEMAN: Mr. Santos, do I understand you to say you are on the verge of taking the position that you do believe that there is a definite relation between soft tissue sarcomas and exposure to herbicides? Did I understand you correctly?

MR. SANTOS: As a group, that is what we -
DR. LINGEMAN: Do you believe that the scientific evidence justifies payment of claims?

MR. SANTOS: Well, let's put it this way. As far as scientific evidence goes as well as legal evidence goes, there is always two sides to every issue. We don't fully believe that the evidence will ever come in within a timely fashion on either side of the issue to convince everyone in this room or elsewhere. We do feel this is the right time, at this point, to address that issue. It's probably a policy decision for those who believe that there is correlation, the answer is, yes. For those who don't believe there is a correlation, the answer is, no. But, for those veterans who do have soft tissue sarcomas, who have come forward, for those who may still have them in their bodies and not know about it, we feel at this time there is ample precedent. mean you go forward and look or go backward and look, there are approximately, we understand, 40 different diseases that now qualify for some disability. The government of

Australia has awarded compensation. The recent court case,

I believe in Illinois, awarded \$58 million in damages to
workers exposed to dioxin.

We don't feel its the time or the place

for the government to wait any longer to make that decision

If the courts have felt that, international governments have

felt that -- it is now the policy, it is time to set policy

along those lines.

Also, for those who are concerned about economic

factors, I do not know what disability rates will be, or the frequency of soft tissue sarcomas, but I assume it's not of Vietnam nearly as large, in terms of numbers veterans. But to be quite moral about it, you don't place a dollar value on it when these people have gone forward to serve their country. One thing that you should realize, that we have heard all along, we've never once heard a veteran come in and complain about his service to his country. They have only expressed concern about the treat+ ment they receive, or their dependents or the lack of treatment for their dependents, about their cancers, about their deaths. They've always asked for service, they've asked for justification, some kind of moral indication that what they did and this is just a mere, mere minis+ cule step in that process. And that's what we're supporting.

DR. SHEPARD: Any other questions? Thank you.

Dr. Anderson from Texas.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DR. ANDERSON: We always have a lot to say in Texas. Dr. Shepard, members of the committee, its a real privilege to be here. I assume that most people in this room have become familiar with the diverse direction in which Texas went some 2 years ago when the legislature put into law the Texas program to assist our veterans who were exposed to Agent Orange. At first it was rather confusing to us in the Health Department as we were given the program, as to how we would approach this, but the law was very specific and said we would develop a joint program with the University of Texas system. I believe Dr. Bill Neaves from Dallas is here. He is the representative from the University side of our program. Ours is a joint program between the State Health Department and the University of Texas'

The centers were very cooperative and promptly came back with protocols as to how they would approach the problem. Of course, these protocols had gone through their research approval committees, so we felt quite comfortable with them. We felt that we had several people on staff who could look at things objectively and that we would, the Health Department side of it, more or less collect the subjective data - the records of the veterans. The University of Texas Health Science centers would look at the problem objectively and from a more medical, scientific point of

view. These studies which were developed, at first, were 6.

Since that time, we have dropped out the mortality study.

We ran the tapes through, we had those in the Health Department. We had the identifiers—and we just didn't have enough numbers. The veterans that had died since 1960's, after return from Vietnam, were in small numbers and significance could not be found.

The primary cause of death I think most people in this room could guess right now, was out on the interstate highways of Texas. They were the right age group for that type of death. Now the other protocols that we have, of course, we're looking at birth defects in children. We had ongoing in the state of Texas a reporting program, a genetic program in the University of Texas system, which the children in the State who are born with birth defects are registered and are followed. For us, its a bit of a retrospective study. We go back, ask the questions of the parents. Was the father a veteran of Vietnam when you entered the program and if you were; was he exposed to AO?

The next was a cytogenetic study which we are looking for, of course, aberrations of chromosomes in

lymphocytes. We have a sperm study going in which
we are also looking at chromosomes. We have an immuno evaluation study at the University of Texas in Houston in which
they are doing a profiling of the immunocompetency
status of the veterans

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

who feel that their immune status may have been compromised by the induction of certain enzymes due to the toxic effects of dioxin.

We're looking at a little more than just dioxins, of course.

The first effort is, of course, of dioxins because we tend to know a little more about that and that's what's in the newspapers anyway.

In the Health Department, we set up the administrative program, of which I was, of course, made the Director. I have a very small staff of one other person and that's it. They gave us a half a million dollars to spend over a 2 year period. We immediately went to work. Fortunately, I had had 30 years military. I had been in Vietnam. a background of some toxicology and occupational medicine. We designed our programs to fit. We immediately said, "what do we need to form the data, some information on our veterans?" We got the questionnaires out, realizing our program, a self-selected program, in which the veteran has to meet several criteria other than just being a Texan. He must have a medical condition which he feels is related to exposure which is verified by a physician. And, to-date, we have 280 in our program. I have reviewed the medical records on nearly 200 of these individuals. The medical records and other records which we get consist of, first and foremost, the questionnaire which, of course, is 3 or 4

pages which he filled out. We then ask him to fill out

he has ever had. We go to St. Louis. We get his military medical record. We get his personnel records, particularly a history of any combat in his duty in Vietnam and other places. We get a "prior to service" occupational history. A history after service, any civilian hospital he has ever gone to, any treatment that his family has received and if they have children, if they feel have problems, and the usual file, when I finally get it to my desk for review is about 3" thick. It takes me several hours to review this. What am I looking for as I go through it? Now, after I have reviewed the personnel records, the medical records military and civilian), I take a look at the possi-(V.E., bilities of his exposure in Vietnam. I also, at that time, use, of course, the herb tapes, any other information I have, and operational records of where units were. Fortunately, I know where a lot of the units were over there. I can come up with a gut feeling as to whether this individual was exposed, not exposed, maybe exposed. Of course, where I was I definitely was not exposed, an officer's club at Da Nang was not exposed. But, I get this gut feeling. And then we contact the veteran. Now ours is a one on one in most We get on the phone and talk with him. And respects. we ask him more questions. I talk to him about his outfit and I say, who do you know around here who was in your

release forms for any and all types of medical records that

23

24

outfit? We'll talk to him. We pull in all this one to one information the best we can.

We see who was in the 27th Marines. We want to talk to some other guys who were in the 27th Marines. I want to talk to as many as possible, if he was Navy and he was down on the Mekong Delta on one of those gunboats, I want to get a good feel for what it was like on a gunboat. And we've had some Navy men that give us a very accurate description of what the C-123 at 150', at around 120 or 30 miles an hour, coming down the river spraying something to knock off all the leaves on trees because they didn't dare run the boats up and down the river without the leaves being off the trees. They didn't like snipers. Well, that to me is a pretty good indication that we're probably talking about a herbicide. I don't think anybody in this room would probably disagree with me. We're talking about a herbicide.

in our program now. We have a selections committee made up of representatives of the University of Texas, more or less the protocol directors, that meet about once every month or two. And I present to them our cases as I discussed with you. And we then will decide whether we will take the individual into our studies. Now the University people are concerned as to whether or not their study has been compromised. We know we have a lot of men who work in petrochemical companies. In Texas we have a number who work in

agriculture, particularly in West Texas where we're still using 2-4-5-T to knock out our mesquite. So we look at all these factors. We eliminate and narrow down. As of today, we have 29 individuals that we have selected, along with controls who were men selected as non-Vietnam, hopefully a veteran, state-side who will compare in age and so forth. In many cases a relative so they may share some of the same genetic make-up.

We feel that we can, over a period of time, with a sufficient number of veterans feel a little more comfortable.

1t. Now I know that the critics are going to tear into us. We expect this. But, the fact is this, something is being done. And that's what our veterans asked us to do. We took the resources we had and we're doing the best we can under the circumstances, to try to get into a really touchy situation.

What do I look for when I go down through the medical records? Well, to tell you the truth, I am, many times, very disappointed. There is always good and bad. For instance, the VA Agent Orange physicals; we always get them. We have no difficulty at all getting them once we request them, we get them. I'm very disappointed, at least from a medical point of view, because they don't tell me very much. I look through them primarily to get the history and to see if they really have an occupational history which goes

В

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

back to when he was a young man, before he went into service. What he's been doing afterwards. Of course, we have already gone out and questioned him and got some of the same information in our own questionnaire. I look particularly for baselines laboratory procedures, both in the military medical records and in the VA.

records. And, what do I really look for?

Of course,

we're looking for chloracne. We have, as one of the selection factors for selecting people for our studies, is the presence of chloracne or a rash, which could be interpreted as being chloracne or similar to it. Remember this, those of you who have looked at military medical records from that time period back in the '60's. Incidentally, I even found my own handwriting in some of these men's records. I was going along and I have trouble with doctor's writing and all of a sudden, I read it beautifully. It was mine. But, anyway, the word chloracne was not well known in those days. Perhaps, a few industrial physicians and dermatologists used it, but most physicians didn't have it in their vocabulary. So, you don't look for it. I look for liver disease, liver disorder and the laboratory procedures that were used at that time to try to get a baseline on the individual. I look for neurological and behavioral changes that people have recorded on individuals. Those that have been in

combat, heavy combat, for instance are never the same again.

They do have certain changes and I think most of the psychiatrists will support that.

I look for, in the individual and the family history, for porphyria cutanea tarda. We find this in our population in Texas down around the petro-chemical plants anyway, particularly among a lot of women.

So I look at the laboratory procedures in this man's medical record. I look for resmits of porphyrin studies, particularly uro-porphyrin , excretions. I look for SGOT's.

Some of the fellows have had some problems so they have done a SGOT. I look for billirubin studies, anything that pertains to the liver, and the enzymes. SGPT's as well. We know that these are all things that are going to increase when a person has been affected with a toxic chemical. Now, industrial physicians are quite aware of this and they use these tests pretty much around petro-chemical plants. Bromosulphthalein

test, the BSP. I look for, particularly in the older men, whether they have had chloresterol studies done, the tri-glycerides, any problems in their lipid metabolism, total lipid studies are very important, toxicologically. We know that lipid metabolism is early affected in many people.

We look at any studies on lymphocyte chromosome aberrations and changes, that have been done. Now, I don't find most of these. That's why I'm giving you a hard time. I just

don't find it in either the military or in VA physicals.

These things are not being included. In fact, in most cases, and unfortunately the GAC, when they did their study, didn't come down to any of our Texas VA hospitals they stayed in other places, but I find that as I go through and I look at the things that can be done to evaluate people and they're not being done in the laboratory.

Most physicians are very good at using a stethoscope and reading some X-rays and so forth, but when you really get down to it, what has happened to his liver? It takes an internist. Most general physicians don't want to get this deeply involved. But those are the things that I look for from a laboratory point of view to get a baseline.

Now, in a few cases, I've found some answers. In most cases, it's not there. Now, with the GAO report, I read it. In fact, a couple times. I was quite interested in it because they were saying some things that I could agree with and also disagree. It became apparent to me immediately that they were not physicians. I immediately said, these people are not doctors, they don't understand the way doctors think. That's alright. I took a look at the report and I said, you know, this outcome that we're after, what are we really getting, as physicians, when we examine our patients? What do I find after I have

reviewed the medical records of veterans? As a physician, what do I see? What do I feel? And, let's face it, those of us who are physicians many times establish our diagnosis on such feelings. You just know they are sick, you know there is something there, and you go after it. I don't think we have gone far enough and that's why, in Texas, the studies we are doing are important. Not that ours are going to be that good. We may not have the numbers. We may not have everything else. But, perhaps, somebody else that has larger numbers can begin to expand this, to take advantage of technology that exists today and do these things. To study an individual who has been insulted with dioxins and not study his sperm is wrong.

Those are the tissues which are most likely to
be early affected and will be permanently affected, 20
years later makes no difference. They still show the insult took place and then move down the line into other body
tissues. Now, to get back to the VA, the
Agent Orange physicals, we have no trouble getting them.
They are a little short in content, particularly in the
laboratory back-up. I have no argument with the timing.
Our veterans seem to be able to go in, get an appointment
and get their physical within a reasonable period of time.
We require all of our individuals in our program to have
had the VA Agent Orange physical. Most of them have already

. В

had it. Now, I did run into a bit of a problem in San Antonio. We requested some medical records and they said that they had been retired and that the only way to get them was to declare an emergency and that they would be used for the treatment of the patient. I said, I will not perjure myself and compromise my medical ethics by lying. There is no emergency and I'm not going to use them to treat the patient, but merely to evaluate. I put it into a letter and sent it to the Regional office. They received it about a week ago. We will see what will come of it, but that's the only real problem that I have had with the retired records that had been sent to St. Louis or somewhere else where you retire your records.

I do have a problem with the AO registry. We requested the names and addresses, I think it was along about last June or something. We got a very nice letter tack saying we'd someday get them. We haven't heard anything. We would like to, at some point in time, get the names of the Texas Agent Orange registry participants. I'm open to questions. I sure appreciate being here.

DR. SHEPARD: Thank you very much, Dr. Anderson.

Are there any questions or comments from members of the committee?

MR. WALKUP: I just wanted to say thank you -DR. SHEPARD: I will be meeting with Dr. Anderson

later on today so we can over some of these particular points or any problems that are related to records or any other information. We're running a little behind schedule, so I think we better press on. Right now I'd like to call on Dr. Mulinare from CDC to give us an update on the Birth Defect Study.

DR. MULINARE: Dr. Shepard, committee members and guests, good morning. The CDC Birth Defects study is well underway. I might summarize for a few of you what we are doing. We are examining, interviewing 10,000 families in Atlanta. Approximately 7,500 of those families have a child with a birth defect and approximately 3,000 have children without birth defects. We are in the process of tracing and interviewing these families from records that we have from 1968 to 1980.

The interviewing process has been ongoing for the last 6 or 7 months and we're halfway through. We anticipate completing most of the interviews through next spring and summer and analyzing the results and having something in the late fall. For the most part, the activites that are ongoing right now -- as you can imagine, looking for people who are, we have records for back to 1968, that's 12, 13 years ago, tend to be rather difficult to find. The interviewing, itself, is going very, very well. There is no difficulty with questionnaires and we've had relatively few

refusals of the families that we've been able to find. Todate, we've interviewed 4,600 moms and 3,600 dads. We
actually do conduct separate interviews for the mothers and
the fathers, feeling that they may be able to give us different information about different questions that we ask. The
reproductive histories may tend to be more accurately from
the moms than from the dads. Any histories that we get
about Vietnam experience most likely will be more accurate
from the dads than the moms.

In order to make a comparison, to try to understand whether or not we're getting information from both moms and dads that are similar, we did run a few cross tabulations and one of the ones that Dr. Erickson has presented to the group in the past -- first, the number of participants in the study who have had Vietnam service. In the past we've been running about 12 or 13% and update, we also have found that approximately 12% of fathers are serving in Vietnam. Now this is within the estimate that we figured at the initiation of the study.

When we interview the moms, we find that the moms agree to the point that they say that approximately 10½, 10.6% of the dads did serve in Vietnam. So, we're getting information about service in Vietnam from the moms and the dads that's fairly close, fairly accurate. And the agreement, as I said, is very good. We are not doing

any other analysis, but one of the things we are very interested in is this agreement between moms and dads. Dr. Erickson has looked at a couple of the cross tabs in the past. One of the questions we asked of moms and dads is whether or not this pregnancy was planned.

I thought I'd just give you the information that we got this time when I ran the cross tabs the other day, just to show you what we're finding.

The question asks the father and mother separately, was this pregnancy planned.

And out of about 2200 or so, we found that both moms and dads in 1100 cases stated, yes, both mom and dad did plan the pregnancy. And in approximately 540 cases, both mom and dad said that the pregnancy was not planned. When mom responded and said, yes, the pregnancy was planned,

95 of the dads said, no, that it wasn't planned. However, when dad was asked and he said, yes, the pregnancy was planned, approximately 200 of the moms said, no, the pregnancy was not planned. This may be an article for "Psychology Today".

We feel that the study is really going well. The next half of the study is going to be more difficult than the first half because, as you may realize, finding people gets more difficult as you go through the study and we're looking forward to trying to maximize mobility and to trace

-80-

them, to trace people. Once we have found them, we've found that the people are very, very receptive to having the interview done and we look forward to the next several months as being ones that are going to require a great deal of work in tracing and finding these people. Thank you.

DR. SHEPARD: Thank you, Dr. Mulinare. Are there any questions? Dr. Lingeman?

DR. LINGEMAN: I just have a comment. I think it illustrates the ability of the CDC to do things well, to implement an epidemiologic study and get it going rapidly and get results soon. And I think that they should be relating to, if not required to do an epidemiologic study which the CDC is all geared up to doing it well, so --

DR. SHEPARD: Any other questions? I have one. Did you tell us, Joe, how many numbers you had done in each group?

DR. MULINARE: There were, we've completed 4,600 mom interviews and 3,600 dad interviews.

DR. SHEPARD: And that's in both the cases and controls?

DR. MULINARE: Yes, that's not separating cases and controls. That's all totalled.

DR. SHEPARD: I wonder if you could elaborate a little bit more on the apparent difference between fathers and mothers perception of service in Vietnam. Have you had

a chance to track that down at all? As I heard you, you said 12-13% of fathers reported they had served in Vietnam, but only 10% of the mothers or the wives of those fathers said it?

DR. MULINARE:

I did do a

cross tab and its always difficult to interpret in the middle of a study, but it will be easy what we have right now. For service in Vietnam, when both mothers and fathers said, yes, that dad served in Vietnam in 240 of the cases. Both mom and dad said, no, that's an agreement that father didn't serve in Vietnam in 44 of the cases. When father said, no, he didn't serve in Vietnam, mothers said, yes in 6 cases and when father said, yes, he did serve in Vietnam, mother said, no in 8 of those cases. And if you set that up as a table you could see that it's really fairly good agreement, basic ally, lack of disagreement in that situation.

The interpretation of Vietnam may vary. Some experience has been that Thailand is included, and that when asked certain questions about Southeast Asia and whether a man served in Southeast Asia, some people had interpreted that as being service in Korea or the Philippines as well. But we still think that basically that the discordance in that particular table is rather minimal.

DR. SHEPARD: Fine. Thank you. Any other

20

21

22

23

24

25

1 2 Mulinare, for a very informative 3 4 5 epidemiological study. think in the New York Times 6 7 largest birth defect study ever conducted 8 pioneer effort. .9 10 .11 12 the committee. 13 14 15 16 17 18

questions or comments? Well, thank you very much, Dr.

presentation, and we wish you continued success. I agree with Dr. Lingeman, this is a very good example of CDC's capabilities of the last few years, a good It's been quoted, I

and by the way there is a rather complete article in Today's Science section, that this is the so, its a

We now, let's see, I think we ought to take about a 5 or a 6 minute break and then I'd like to reconvene and we can go over some possible comments from the members of

(OFF THE RECORD. BRIEF RECESS.)

DR. SHEPARD: The meeting to order again, please. We wish to have enough time to take questions from the audience. Prior to that there are two agenda items that I'd like to cover. First of all, I'd like to hear from any of the service organization representatives, if they have any comments or questions or concerns of their membership that they'd like to bring to the attention of the committee. We normally have that on the agenda.

That's a very

important part of our effort. And, so I'd like to call on Mr. Charles Thompson first to see if he has any words of

wisdom to bring to us.

″11

MR. THOMPSON: Well, I'd just like to reiterate what my colleague, David Gorman said at the last meeting to continue our efforts to objectively inform membership to our magazine of the current events on the Agent Orange issue. One other factor and we'll go on record here too, is the fact that we -- have a correspondent with HHS about the transfer of the epidemiological study to CDC in Atlanta and we request this transfer take place as soon as possible. That's about it for me.

DR. SHEPARD: Thank you. Mr. Sypke from the VFW?

MR. SYPKO: The only comment I have to say is,

you probably read it in the newspapers this week that our

position is fairly strong backing the Daschle bill on the

soft tissue sarcoma.

DR. SHEPARD: Fred Mullen?

MR. MULLEN: I just have a couple of questions. At our last meeting it was mentioned that the VA allocated about a dozen FTEE to augment the portion of the study that they were conducting at that time or were going to be conducting, and we are concerned that the sharing of information with CDC, health related information, is of utmost importance so the transition goes as smoothly as possible.

Dr. Custis expressed two points of concern regarding criticism of the administration that has heretofore befallen our Agent

Orange Advisory Committee as well as the rest of the VA involved in the different studies; and, also there is a question of credibility. Well, it seems that the credibility question is being resolved by the transfer of the -- epidemio-logical studies to CDC, but there remains the subject of the criticism of the administration. Since the epidemiological study is going to be transferred to CDC, has the VA complied completely in supplying CDC with all the information that they have available and since this is going to be a rather large study, is the VA considering transferring any of the FTEE's to CDC to help them get the study started?

DR. SHEPARD: Yes, two good questions. First of all, we have transmitted already to CDC

virtually all documents

that had been developed both by contract to UCLA and the comments of the various review groups, the National Academy of Sciences report, efforts that had been ongoing regarding the cohort selection

process and so forth. So, I think its accurate to say that we have already transmitted virtually everything that we have, in terms of factual material, planning documents and so forth to CDC. So there should not, now, be any delay in

developing or finalizing that protocol as far as existing information is concerned.

On the matter of the FTEE, we have yet to have a request from CDC or an identification from CDC of the requisite resources for conducting the study. So, as soon as we have their input on the issue of resource requirement, we will be in a position to respond to that request.

MR. MULLEN: Does it necessarily have to be requested or couldn't we let it be known that certain FTEE's will be available if they decide they need them?

DR. SHEPARD: The only reason for my hesitating at all is that the process is perhaps somewhat more complicated than the VA turning over FTEE's to HHS. It is my understanding, and I'm not an expert in this area, but it is my understanding that the transfer of FTEE between government agencies is under the control of the Office of Management and Budget. So it is not simply a VA to CDC effort. There are other agencies that have to be involved in that process. I don't think that from the VA'S perspective there would be any problem in responding to any reasonable request on the part of CDC for both dollar and personnel resources. I don't foresee any problems from the VA --

MR. MULLEN: You're still involved in many studies, like being involved with the Twin Study, with the EPA on the tissue

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

sample studies, and mortality studies. I believe that in those FTEE's allocated there were provisions for both junior and senior epidemiologists and a biostatistician.

Now, are you going to retain any of those three FTEE's?

DR. SHEPARD: Yes, that brings up a point that I was trying to make earlier, but now that you've mentioned that. I'd like to clarify or elaborate a little bit on Dr. Custis' point about the organization of our office. I used to be designated as Special Assistant, Chief Medical Director. Our office is now known as the Agent Orange Prohect's Office and our mail symbol is 10A7. We have two sections within our staff. That is, an administrative staff and a program or a research/program staff. The latter is being augmented with 5 additional personnel consisting of the following: a senior epidemiologist, a biostatistician, a statistical programmer, an administrative officer with experience in dealing with research projects, contracts and so forth, and one additional clerical person. So, that's 5 FTEE's that have been approved, and the positions have been approved. The PD's have been classified. We are now in the process of recruiting all 5 of those individuals. They will be the core group heading up and monitoring the research efforts that will remain with our department.

MR. MULLEN: Thank you.

-87-

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

DR. SHEPARD: Dr. FitzGerald? Do you have any comments from the Legion?

DR. FITZGERALD: Nothing to report today.

DR. SHEPARD: Thank you. We did leave some time on the agenda to discuss other research efforts that the members of the committee might feel to be crucial and so I'd like to spend a little time on that. Then we will open up the discussion for questions from the floor. I'd start the discussion rolling a little like to bit. As I think I have reported in the past, we have been working on and now awarded a contract to the JAYCOR Corporation to do a search of a random sample of some 15,000 Vietnam era veterans who are in our Patient Treatment File. calls for a search of military records The contract established within this group of Vietnam era veterans who actually served in Vietnam and who did not.

It appears to me that there would be an opportunity then to compare medical information on these two groups of individuals. The question that has been raised, and I would like comments from the committee on it at this point, is it a statistically valid

procedure to compare these two groups given that these are individuals who have eligibility for health care in VA hospitals.

It's been suggested

-88-

Б

are in the VA system, and that one could not, perhaps, validly extrapolate that to the general veteran population. We are grappling with this issue. In other words, to what extent can we validly base conclusions on comparison of two groups within the patient treatment files? That's one question that we'd like some help on.

On another issue is the matter of the soft tissue sarcomas that exist in the Patient Treatment Files. We are currently going through a search of the Patient Treatment Files and have come up with approximately 200 soft tissue sarcomas that have been identified as existing in Vietnam era veterans.

is such that you cannot distinguish the types of soft tissue sarcomas within this group. These are classified as connective tissue tumors. We will attempt, by means of going back through the medical records of the individuals in the VA hospitals, to identify the type of soft tissue sarcoma that these represent.

From there we would go to a search of the military records to determine which of these 200 some individuals actually served in Vietnam and compare them to a group that did and did not serve in Vietnam. But those are two efforts that we are currently embarked on

using our internal VA medical information --

DR. FITZGERALD: Dr., how many cases do you think you have of sarcoma to look at?

DR. SHEPARD: Out of 203 in the ICD-9, 171 series which is connective tissue tumors.

DR. FITZGERALD: So you don't have too many to distinguish in the sub-types?

DR. SHEPARD: No, about 200, 203 I think and that includes all in the Vietnam era. As you know, the patient Treatment File gives a discharge diagnosis of any veteran admitted to a VA hospital and those discharge diagnoses are coded according to the ICD-9 coding system. Unfortunately, the cell type is not coded so we have to go back and get the cell type to distinguish --sarcomas from fibrasarcomas from other soft tissue sarcomas, use the actual cell type because these tumors have their own prevalence rates.

I don't feel its scientifically valid to lump all soft tissue sarcomas together in any way and try and make any meaningful conclusions from that.

MR. GROSS:

Does anybody feel

that this is an unexpectedly high number? -- What would be the expectation based on?

DR. SHEPARD: We have not made that analysis as

yet. We did take a quick look at the soft tissue sarcomas in the registry and that did not suggest an unusually high incidence in the registry. But, there again, being a self-selected group one can't make very valid comparisons.

## MR. GROSS:

I think it is important to leave oneself every opportunity for flexibility. One should add things together, break them apart, look at it in different ways. Remember when Dr. Irey was here, I believe last time, there was a problem that he had a large number of diagnoses, but only one or two entries in each one of these. Well, these certainly don't mean very much. It's nice to look at them separately, but then one should give oneself the opportunity

## DR. SHEPARD: Yes. I think

one of the justifications for looking at them separately is, if in the Vietnam veteran group there is a marked difference in the prevalence rate within the group of soft tissue sarcomas, in other words, if the normal prevalence within soft tissue sarcomas, I believe, -- sarcoma, fibro-sarcoma - the two most common - if some other more usual soft tissue sarcoma appears to be at a higher prevalence within that group, then that might signal something. So that would be one of the reasons I would think you would want to look at cell type. --

DR. HODDER: No, just maybe a comment on the fact this is the exact kind of study that shows you why you have to go to a cohort type of design because you're looking at 200 -- an unusual amount, and basically the answer is, you can't tell. For two reasons, one, you don't have a comparison. Well, the first reason is, you don't have a denominator really that you can, at this point, use because you can't use a known group who have served in Vietnam because -- actively. The only, I guess, good comparison would be to get, let's say, a Korean war cohort to get an idea of the --. But, then again, you have to look at the frequency of using the VA. So this type of study, while its interesting, is very difficult to do. --

DR. SHEPARD: Thank you. Any other comments from members of the committee or any other suggestions for additional research efforts? We might start thinking of it.

We're in the process now of building budgets and now is the time to think about what we should be looking at in the future. Yes, Joe?

DR. KEARNEY: I have two. These are in the form of suggestions. I'm concerned that the epidemiology study is again delayed. I won't go into all of the background that's involved in the newspapers, but from a scientific standpoint we have a further delay. We have more time now to wait before we get a final answer and it must be difficult

В

for the politician facing his constituency to answer this question. It's difficult for the VA to answer the questions about possible effects. And certainly as a member of this panel when I go before the press it's difficult to answer these questions. But this doesn't say that things aren't happening in this world and every month I get 3 or 4 publications, articles, research articles about experiments done on a global basis. So, my suggestion is that we get a critical evaluation and conclusions on global research condications exposure and adverse human effects.

We have the literature review done by JRB, which

was good, but now I think we need to sit down, looking at the global literature and to group the studies under
various health effects, birth defects, to summarize the
number of studies conducted, the number of people involved
and a critical assessment of those studies and sound scientific conclusions.

cerned that the anxiety will continue to build because we have another for 8 years or 10 years of studies. This is hardly a satisfactory answer when people are concerned, as they are. So, I think we've really got to bite the bullet. I think we've got to do it, perhaps outside of this committee, to sit down and look at all the literature that is available to us. Its really rather large, and arrive at

some interim assessment as to where we are. If we don't do that, I think we're going to see further anxiety, further frustration from all segments of society. That's a form of suggestion.

Number two, I would like to see us do more on the question of exposure. We live in a chemical world. I don't think it's outside the realm of possibility that in either a limited or global warfare that chemicals won't be used again. We may go through this same process 10 to 15 years from now! Hopefully, we won't. But, it seems that we have an opportunity to arrive at some numbers, some estimates on exposure to chemicals based on things like distance from the point of application, time in the zone of application, that is, if you're a combat soldier in an area that has been sprayed, what is the effect of the length of time you're in that zone and your possible dosage? The residual time of a person in that area, the residual time of the chemical, the effective particle size, a whole raft of useful information that could be useful to us in further designing the epi study, but in a larger context, it would be helpful to other segments of society where we have to make a riskbenefit assessment on exposure data. Our models are not as good as they should be. to get exposure in fixed wing aircraft and with helicopters, but a larger segment of the scientific community could use this data. I think it would

-94-

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

be a service if VA would pursue this to get some better information on what exposure is.

DR. SHEPARD: Thank you, Dr. Kearney. They are two excellent suggestions and you're quite accurate -- in the problems of exposure. We are going to have a meeting of the Agent Orange Working Group, I believe on the 15th of December, and at that time the latest work of the subcommittee of the Science Foundation on cohort selections and I think that we've pretty much come to some closure in that area and it should be an interesting meeting -- taking up that issue.

I certainly agree that the whole issue of chemical exposure is one that's important to the entire federal government. I would hope that other agencies would continue work, the ground work that's been laid by the Agent Orange Working Group and the science panels and pool our resources so that we can build on the foundations that have been laid in this regard. It's very important. On your first point, if you give me an opportunity to take a few to just bring you up to date minutes, in what we are doing in the area of literature analysis and so forth. You know the JRB effort that you referred to is publish or now over a year old and we'll soon request a proposal for an update of that with special emphasis on the human effects. I think that will be a

very

useful effort. In addition, we've been approved, we've been funded for four monographs, one of which will deal with the known human effects of phenoxy-herbicides and other herbicides. So there is going to be a monograph as well as the literature analysis.

Of course, we'll also be doing a monograph on birth defects, genetic screening, genetic counseling, and

Agent Blue, Hopefully, as Dr. Fisch-

mann indicated,

we'll have a major monograph on chloracne. These, I think, will all be relative firsts in the field and we are very much looking forward to this effort. Yes?

DR. LINGEMAN: I'd like to say that the VA has some capabilities within the system to do some things that have not been done. I believe that Dr. Fischmann's report illustrates that there is considerable scientific talent within the VA -- I think there are certain other areas that could be dealt with in a similar manner. Task Force is a good word or maybe one or more sub-committees. Some areas that could be studied within the VA in small studies as opposed

could be studied within the VA in small studies as opposed to large ones would be the lymphoid system, the liver and the nervous system. Within the VA I think there are some good possibilities. Men with known service in Vietnam could be subjected to intensive studies of the lymphoid tissues. Another area

which could be done very well within the VA would be the

study of hepatatoxicity. I think we have evidence that the VA has some excellent physicians on the staff that are capable of doing intensive studies of the problems of such exposed men.

The third area that I think could be studied in this way would be the central nervous system. There might be two possibilities. One might be an intensive study of toxic neuropathies.

This is an area that very little is actually

known, but I think the VA could make a great contribution to the world literature on such an effort. There are many excellent neurologists in the VA and I think, in consultation with known experts in this area, a good study could be planned.

The psychiatric aspects of dioxies also need to be studied. There is no good psychiatric test for toxic psychiatric symptoms. This is an area that has been relatively unexplored. I think its one that should be looked into, particularly since anxiety appears to be a major symptom of people with exposure to dioxin. The effects of anxiety itself should be separated from direct toxic effects of dioxins. I think this capability probably exists within the VA. If not, it that, again, could be done by a contract with someone on the outside.

The fifth area I think needs to be resolved is that of the soft tissue sarcomasand getting you and I -- Dr. Enzinger (STS). Experts, such as the AFIP's Dr. Enzinger, need to be consulted more frequently. One

criticism of the

-97-

Swedish studies is that all types of STS, visceral and non-visceral, were condensed together in a mixed bag that no one can make anything out of it. So, — by the time you break them down into too many categories, you have something that may be meaningless. On the other hand, if you don't have some good reason for separating them, then perhaps you are justified in lumping them all together.

So these are my suggestions, that the VA could select target organs for studies of toxicity and study them intensively.

DR. SHEPARD: Thank you. Dr. Woodward?

DR. WOODWARD: In support of the comments just made, the National Academy of Sciences in 1952 sponsored a study of the — effects of blood dyscrasia and chloramphenicol. I can tell you that the only reliable and analyzable data came from the Veterans Administration. Most of the other data was antedotal. The point is that the VA had good records, there was continuity of care, and it had the only available information regarding a reliable denominator and an answer pertaining to risk.

DR. SHEPARD: Thank you. Mr. Walkup?

MR. WALKUP: I guess a few comments about the limits of science I think as part of your question. A lot of what we've heard today has been about — the limitations that we've got of even being able to apply the science that is available is the time-frame that's involved in getting

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

the answers. It is definitely going to create problems for the people. This is a strange Advisory committee with a dual role of scientific advisory plus advisory about the people. One of the most significant things, I think, that's come out of all the chaos has been what's happened with the CAC report. All the unanswered questions that are out there. What's happening with all of the state organizations, they're trying to find the answers too. And their frustration and the frustration of many veterans with us not being able to find the answers. You'd think at some point, it's the responsibility of this committee to respond to the question that was asked by those organizations today, a policy question not a scientific question, that, given the lack of information that we have been able to provide, at what point is it our responsibility to shift the burden of proof from the veterans who have no resources to be able to conduct these studies, if we haven't been able to conduct them.

And to take a policy action which says that until we are able to -- that information, its our responsilibity to attempt to respond to the needs. To some extent we've done that -- but specifically there were some recommendations that came out of that committee and the National Veterans' Task Force on Agent Orange is on record as supporting the recommendations that the state commissions

al study to the CDC.

came up with and I would like to endorse those and other members of the committee to endorse those too, in addition to the VFW's endorsement of the Daschle bill and the DAV's endorsement of the movement of the epidemiologic-

The recommendations of the state commissions triefly were that this body endorse the transfer of the epidemiological study to the CDC with adequate resources to fund that study under the Vietnam experience factor,

Also that we support the bill under consideration in the House of Representatives concerning the presumptive disability for Vietnam veterans. The National Veterans' Task Force on Agent Orange endorses those and urges other members of the Advisory committee to do so also. If we don't do that, I think our silence will mean that we don't endorse this.

DR. SHEPARD: Thank you, a good point. Excuse me, Dr. FitzGerald?

DR. FITZGERALD: I would like to go back to Dr. Lingeman's suggestion about the research studies. Basically, I agree with what Dr. Lingeman said, The strength of the VA in research is in its cooperative studies because of the vast organization it has and the distribution it has

I think that this is where meaningful information is going to come out rather than going into several small

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

В

isolated studies. That, indeed, if you could develop a cooperative study in the effects of Agent Orange within the Veterans Administration.

DR. SHEPARD: Yes, I think that's a very good point and I certainly will continue to encourage this kind of effort. You know we went out with a solicitation for research projects related to the effects of herbicides and dioxin on animal studies primarily. We've got 10 good studies going in that area. We need now to encourage additional clinical studies. Of course, the twin study will be such a study. It will not be a cooperative study in a sense that we will be using large numbers of VA facilities, but I hear what you are saying. I agree that this is an area that the VA has been able to make a major impact on the body of scientific knowledge that was available to us. I think we have an obligation to pursue them.

I'd like now to encourage comments and questions from the floor. I have one question here from Mike Sutton, from the VVAW and he says, Dr. Custis stated the minutes of the Executive session will be published. The question is, will you release the minutes of the last three closed sessions of February, May and August? If so, when? If not, why? Did we have three closed sessions?

I think we've only had one closed session, and that was a session that related to the discussion of the

UCLA protocol.

That meeting was in May. We did not make a transcript of that meeting in the sense that we do in these open meetings, but there are minutes of the closed session. We did discuss the protocol and prepared some review comments which have been forwarded to CDC along with the other comments.

# Yes, Doctor?

DR. FITZGERALD: I think to respond to that also, that closed session, if you'll recall, was not for any other purpose than to respond to the criticism of some of the members of the panel that the entire questionnaire was not made available to the members of the panel. The questionnaire had not been made public the same way as the Air Force questionnaire had not been made public in order to not hazard the study by having people respond to known questions before they are examined. That is all that was taken up in that committee. It was a chance for us, as individuals, to examine that questionnaire and until the actual examinations are done, I can only agree with the fact that the study should not be hazarded.

DR. SHEPARD: Thank you, Doctor. I have a question here from Jim Hebron from the New York State Temporary Commission. "First, will the VA agree to allow the CDC to have complete freedom to pursue the epidemiological study as CDC sees fit?" I can assure you that the VA has no desire cr intention to manage, control, even monitor that study.

Dr. Custis feels very strongly about this and its very carefully written into the proposed interagency agreement that the CDC will have complete autonomy in terms of policy and management of the study. The VA's role will be that of funding the study because the study was mandated legislatively to the VA, so the VA still has some responsibility in the area of providing the requisite funds, but other than that, we have no intention to make any efforts to influence the CDC in terms of how the study should be conducted and when it should be completed.

The second question. "Will there be a guarantee that the CDC will receive the necessary funding now and in the future?" As you all know, that responsibility lies with the Congress. We cannot guarantee what the Congress will do. We can guarantee that we will put in our budget the requisite funding. Whether or not the Congress will see fit to provide those funds, of course, remains to be seen. I would think that the Congress, because of its intense interest in this whole issue, would probably see fit to fund any reasonable request for the conduct of the study.

This is from Matt Kinnard of our

Research Service, here in Central Office --regarding Dr. FitzGerald's comments. "After the preliminary review and approval of the twin study, R&D has recommended that the conduct of the study be done under the cooperative studies

2

5

6

7

8

9

10

11

12 13

14

15

16

17

18 19

20

21

22

23

24

25

mechanism. There has already been some effort to use that process." Are there any other questions from the floor?

Any comments, discussion? Yes, this is Colonel Brown from Pennsylvania. Why don't you come on up?

COL. BROWN: In our discussion yesterday with members of the HHS, a comment was made that the CDC, if they take the study, this is not a fact, they have a choice, they could refuse the study. I questionned whether they thought they had the luxury of ever turning it down with the country pushing it in their direction. But the one was--that they may not choose to use the UCLA protocol. Is that a fact? That with all the money, the time, the 4 years of discussions and reviews, must they stick to the design, the UCLA design or do they have the luxury of saying, no, we're going to throw it aside. We're going to use some part of it, but that is not the way we're going to run the study?

DR. SHEPARD: In answer to your question, Colonel Brown, I really can't answer that question other than conceptually. I don't think that there is anything binding on CDC to use the UCLA protocol. I think, however, that as a practical matter, a tremendous amount of effort has gone in, as you suggest, I doubt that CDC will completely start from scratch. I know that efforts are underway, have been

₿

underway of reviewing the protocol and refining it and so forth. But, really, I don't know the answer to your question in terms of what they are planning to do. We have not yet seen their final proposal or even a preliminary proposal. I know they are working very hard on it and I hope that something will be forthcoming very soon.

I think it also is important to state that the VA will not be in the position of approving the protocol that CDC chooses to adopt. We are not going to be in the position of approving CDC's plans. We'll be interested in it obviously, we will fund the study, but it is important to point out that the VA is not going to be the one that will be the determinant of exactly what protocol will be used. Yes?

founder of Agent Orange Victims of Atlanta. I founded it after my husband died in 1980 from non-Hodgkins lymphoma. I did a TV show for a year in Atlanta called "Bette's Forum" on cable about the problem of Agent Orange and other veteran's problems. I did it with two veterans and they died a month apart so our show had to be cancelled until we can start again. They both died from soft tissue cancer. All of these men I'm talking about are under the age of 40. The only thing we had in common was they were all in Vietnam. I have many friends in Atlanta that are widows and

-105-

we have a lot of children between us. All we can do is beg you, the panel, the people in the audience, look attit from our side too. You hear the scientific facts, but listen to the human side. Our lives are destroyed. Our husbands are gone. Our children are dying or either they have birth defects. It seems like there's no hope for the future for us. What can we do? Can anybody guarantee us any hope? What about our grandchildren? Will we ever have a night's sleep again?

You know, what's going to happen to us? We're not concerned just about ourselves. We're concerned about our whole world. What is going to happen? We don't know yet what's going to happen. In Atlanta we hear lots about James Francen, the nursery worker, that his lungs were destroyed by paraquet. They don't say allegedly destroyed by paraquat. We hear, his lungs were destroyed by paraquat, which is a herbicide. Now, why can't we be given the same consideration? Is it because there is so much money at stake? Money does not mean anything to us because even if we win our compensation or anything, we have lost, we have all lost. So, all we can beg you for is just some hope for the future. Please, it's the most horrible nightmare. You can't imagine what happens to these men when you're trying to take care of them yourself and we're not nurses. We're not qualified to take care of these horrible things that

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

are happening to us. So all we can do is just beg you, please listen to us and please look at each case and think of what's happening to our families and our future generations. Because it just doesn't affect us. Because we know what kind of chemicals are being used in the United States too. We have Love Canal, the forest industries out West where women have been told to plan their pregnancies around the spraying missions and things like that. Just listen to us and give us some kind of hope that the use of chemicals in the United States and in the world will be studied more before they're sprayed without knowing what can happen. That's all we can ask you for, just help us.

DR. SHEPARD: Thank you very much. I appreciate your coming here. We hope to have somebody from our veterans' Counseling Office here to meet with Melinda and your friend at 12:15. Is that all set up? We will have somebody here that can address your particular concerns in terms of -- Yes? Senator Carl Berning from Illinois.

SENATOR BERNING: Somewhat as a follow-up to this ladies questions, I have a question that I'd like to pose. It represents somewhat of a consensus of questions from the various agents that formed commissions in the conference.

Inasmuch as the scientific studies are projected to continue for anywhere from a year to 5 or 6 or 7 years and decisions affecting those people who are now suffering,

apparently would require some political determination, our question is simply this: if we assume a positive political posture, and do appeal to the Congress, Congress members individually of our states as well as collectively, will the VA, if not actively join in our efforts, passively refrain from attempting to interfere or block our efforts? Recognizing there is quite a difference of approach between the scientific solution and a political solution, we would like to know if we can approach Congress

we aren't going to be running into bureaucratic blocks. Would you care to comment?

DR. SHEFARD: -- illusive treatment of a knotty problem, Senator Berning, and you better than I are aware of the political implications involved. I think that the only thing I can really say

is when legislation is proposed by the Congress,

it is passed to the appropriate agency for comments. That is a fairly complex process in many instances and requires, I would say, the corporate wisdom of an administration such as the VA. I think that one has to look at those issues on a case by case basis and it's

difficult to generalize. I can give you a little bit of example as to what has happened in the past regarding certain legislation. I am referring now to Public Law 97-72 which was proposed as an authorization for care to Vietnam veterans who perceived a health problem resulting from their exposure in Vietnam. I think the VA cooperated rather promptly with the Congress in implementing that legislation to the extent that we drew up guidelines which we felt were reasonable in terms of what kinds of conditions might be suspected as possibly being related to exposure to Agent Orange and what kind of conditions by any rational approach to the problem would be excluded as having been not the result of exposure to Agent Orange.

A similar piece of legislation was passed relating to exposure to ionizing radiation and guidelines for that implementation were drawn up. So I think that in that instance, we worked very closely with the Congressional committees and came up with a good solution to a rather complex issue and I think that that's worked out reasonably well. I would hope that reasonable legislation is proposed that we would approach it, that the agency would approach it in an open-minded fashion. But I think we'd actually have to look at the language of the legislation before we could make any comment on it.

SENATOR BERNING: Let me challenge that just a

bill, we want you to look at the concept. In other words, help now versus a determination of possible help one year, 5 years, 10 years down the road. The position of you, the VA or any other agency to whom a bill might be referred for comment could either be bludgeoned into insensibility or killed with kindness or just passively accepted as commented on with a bit of encouragement versus a great deal of opposition and that's the sort of position we'd like to have you take. Namely, you may have reservations, but if the objective is something we cannot any longer avoid, in my opinion. We hope that the conviction of those of us who represent the various state's commissions is beginning to make itself apparent to you gentlemen and ladies and anyone else who has any interest in or obligation to this problem. So we would, if you don't care to take a firm stand, please keep in mind that, at least in my individual personal conviction, this is going to be politically resolved and I don't mean partisan politically, a political decision, a political answer and it's going to rise or fall, to a large extent, on the degree of acceptance or resistance by the people who influence the Congress and the bill that's been referred to --

minute. We wouldn't want you to look at the language of a

DR. SHEPARD: Again, my only response is that we would remain in the posture of supporting

24

25

veterans' causes, that we, the agency, views itself as the advocate of the veteran not as the adversary of the veteran so I think that the record stands very clearly that the Veterans Administration does support reasonable legislation that will further the cause of veterans. Again, I'm not an expert in this field. I don't feel comfortable about speaking for the administrator on such issues. However, I think, as a matter of principle, I think that reasonably safely that the VA stands ready to support veterans' causes Are there any other questions or comments?

Well, we've come right down to the wire and I

Well, we've come right down to the wire and I appreciate all of your attendance and contributions. We look forward to seeing you in about three months.



# Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

Sixteenth Meeting May 20, 1983

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

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

May 20, 1983

The committee met, pursuant to notice, at 8:30 AM, DR. BARCLAY M. SHEPARD, M.D., Chairman presiding.

## MEMBERS PRESENT:

BARCLAY M. SHEPARD, M.D., Chairman Acting Director Agent Orange Projects Office (10A7) Veterans Administration Central Office Washington, D.C. 20420

FRANK CORDLE, Ph.D. Chief, Epidemiology and Clinical Toxicology Unit Bureau of Food (HFF108) Food and Drug Administration 200 C Street, S.W. Washington, D.C. 20204

RICHARD A. HODDER, M.D., M.P.H.
COL, MC, USA
Deputy Director, Division of Medicine
Walter Reed Army Institute of Research (WRAIR)
Washington, D.C. 20012

MARION MOSES, M.D. 500 W. University Parkway #15N Baltimore, MD 21210 FREDRICK MULLEN, SR. Claims Consultant Paralyzed Veterans of America (817A) Room 117 811 Vermont Avenue, N.W. Washington, D.C. 20420

THEODORE P. SYPKO
Field Representative
Veterans of Foreign Wars
of the United States
200 Maryland Avenue, N.E.
Washington, D.C. 20002

CHARLES A. THOMPSON
Administrative Assistant
National Service and Legislative Headquarters
Disabled American Veterans
807 Maine Avenue, S.W.
Washington, D.C. 20024

NOEL C. WOOSLEY National Service Director AMVETS 4647 Forbes Boulevard Lanham, MD 20706

## ALTERNATE MEMBERS OR SUBSTITUTES PRESENT:

(For IRVING B. BRICK, M.D.)
THOMAS J. FITZGERALD, M.D.
Medical Consultant
National Veterans Affairs
and Rehabilitation Commission
The American Legion
1608 K. Street, N.W.
Washington, D.C. 20006

(For JON R. FURST)
HUGH WALKUP
Department of Human Resources
City of Seattle
400 Yesler Building
Seattle, WA 98104

(CAROLYN H. LINGEMAN, M.D.)
MARY KORNREICH, Ph.D.
National Toxicology Program
Room 3A06 Landow Building
National Institutes of Health
Bethesda, MD 20205

## INDEX

PRESENTATION OF:	Page
Call to Order and Opening Remarks	1
Barclay M. Shepard, M.D., Chairman	
Announcement/Report of Recent Activities	4
Recess for Subcommittee Meetings	13
Report of Subcommittee on Education/Information	14
Mr. Fredrick Mullen, Sr.	
Report of Subcommittee on Epidemiology/Biostatistic Richard A. Hodder, M.D., M.P.H.	28
Richard A. Hodder, M.D., M.F.II.	
Evaluation of Subcommittee Process	35
Committee	
Recognition of State Officials/Representation	
on Advisory Committee	44
Comments and Discussion	46
Audience	
Adjournment	62

## PROCEEDINGS

DR. SHEPARD: Good morning ladies and gentlemen. I would like to call the meeting to order. I appologize for the brief delay, but I think we can get through our agenda comfortably this morning.

I would like to welcome you all to our 16th quarterly meeting. It doesn't seem possible that we've had that many meetings. Since our last meeting, I had my third anniversary as Chairman of this committee. The years roll by.

Anyway, it is always a delight to meet you and have the opportunity to discuss issues with you.

I would just like to remind the committee and those in the audience, that this committee is charged with the responsibility of assembling and annalyzing information which the VA needs to formulate appropriate medical policy and procedures in the interest of verterans exposed to herbicides during their military service in Vietnam.

I think you will all agree that the Agent
Orange issue has not gone away. Perhaps, it has
even become more intense in some aspects and I think
we still have a lot of work ahead of us. So,
although it has been over 4 years now since this
committee was first formed, the work is no less
important than it was in its early days.

I'm happy to report that since our last meeting we've had a 2 year renewal of our charter. As you know, this committee is chartered under the Federal Advisory Committee Act, and, as such, we have a renewal of our charter periodically, on a 2 year basis, and that renewal has now been granted for another 2 year period, to extend to April of 1985.

This meeting, as have all previous meetings, is open to the public and we welcome the presence and, at the appropriate time, the participation of those people in the audience.

For those of you who may be here for the first time, we remind you that there will be a period of time, following the formal agenda, in which we will solicit questions from the floor. In order to facilitate that process, we would appreciate you writing your questions down. Don Rosenblum, the very able executive secretary for this committee, has cards and pencils.

Please write your questions down. That kind of makes the process flow a little more easily.

In order for us to have a record of attendance, we would encourage you all to sign our registry out in the lobby. We are very happy to have with us this morning, Dr. Mary Kornreich, who is a Ph.D.

toxicologist with the National Toxicology Program

She is sitting in for Dr. Carolyn Lingeman who could not be with us today. We are very happy to have you here, Dr. Kornreich, and solicit your comments as they are appropriate.

We are also very happy to welcome, for the first time, Mr. Noel C. Woosley who will be representing AMVETS. Noel, nice to have you with us. Noel, as I say, comes to us from AMVETS, and this is his first meeting. He is the National Service Director of AMVETS and served 12 years in the Army including 2 tours in Vietnam. So, I think it is dertainly appropriate that you be a part of our program.

As we talked about, at our last meeting, we are implementing a slight change in our procedures. For a number of reasons, which we talked about fairly extensively last time, we have established 2 subcommittees. One to be a subcommittee on Epidemiology and Biostatistics and, Dr. Hodder has kindly agreed to chair that subcommittee.

And, we also have a subcommittee on Public Information and Education and that will be chaired by Mr. Fred Mullen. These subcommittee meetings will be held concurrently. The subcommittee on Education and Information will remain in this room.

The subcommittee on Epidemiology and
Biostatistics will move to room 139 which is to your
left, across the lobby as you exit from this door.
Across the lobby, go up some steps, and it will be
on your left-hand side. And, we'll make those
changes at the appropriate time.

We have a number of announcements to make.

Among which are the fact that, at the encouragement of the Administrator, a small group of us is going to initiate an information outreach effort.

Starting next week, we will be going to Philadelphia where we will spend 2 days. From there, to Boston and then, the first few days of June, we'll be in New York. And, the last several days of June, we'll be out on the West Coast at Los Angeles and San Fransisco and then returning by way of Houston and Chicago.

We will be hitting 7 cities, 7 major metropolitan areas. In all of these areas there has been an increased level of concern and interest relating to the whole Agent Orange issue. The purpose of this effort is several fold.

First of all, it's part of an ongoing process that was initiated a number of years ago. We feel that it is a very important function of our office and

of VA Central Office to make every effort to keep veterans informed as to the progress of the issue, status of research, what the VA is doing, and

to make sure that our VA personnel are kept abreast of developments and, also, afford the opportunity for interfacing with a number of different groups.

Our agenda, principally and primarily, provides for, in each city, a meeting with some of the key staff of each of the medical centers in that metropolitan area, a fairly long session with VA employees from a number of the medical centers in each of the areas we will be visiting. Also attending will be those VA officials involved in adjudicating claims and veterans counselors.

That will be, primarily, an update as to the status of research and program activities and will give us an opportunity to answer questions.

It will also give people in the field an opportunity to raise concerns for discussion purposes.

We've also scheduled very important evening sessions in each of the cities.

At this session, and it is specifically designed as an evening session to enable as many veterans as possible to come and have a dialogue with us,

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

we want, very much, to stay in close touch with all concerned Vietnam veterans, and we will have, at 2 hours, that may stretch out to more than 2 hour sessions, and we are encouraging all Vietnam veterans who are concerned, who want to talk to us, who want information, to be part of that process.

This will be a somewhat less structured agenda. We want to devote most of the time to veterans' questions. We'll be giving some information update, but, it will be primarily an opportunity for veterans to bring their concerns to us and for us to answer their questions.

We also want, very much, to maintain our on-going relationship with all state Agent Orange Commissions and committees, so, there are times provided for doing that. We also want to stay in close in touch, as we have, with veterans service organizations.

So, we are encouraging the leadership of all veterans service organizations to be a part of this process. We have informed each of the centers involved of the program. We are also attempting to get the word out to all veterans through a variety of means. Through the media, the service organizations, and our readjustment counseling people; we are trying to

make this as a broad brush an effort as possible.

We'll be reporting back to this committee, the result of these efforts and, hopefully, they will be salutary. Needless to say, we are informing the congressional members from the respective areas as well as the House and Senate Veterans' Affairs committees so they will be kept abreast of our activities.

It's a real pleasure to announce that we have awarded a contract to Clement Associates for an update of our literature analysis. As you recall, in October 1981, we completed the first literature analysis and critical review of all scientific literature on phenoxy herbicides.

Since that time, it has been estimated that some
500 new publications of significance to
this issue have appeared in the scientific literature.

It is very important for us to keep this effort moving so we can bring together, between covers of several volumes, all the information that is available.

Associates on board with this effort and, it gives

me pleasure to announce that Dr. Carl Schultz and

Mr. Wayne D. Reinehardt

of Clement Associates are with us today.

I'm sure some of you may want to address questions

to them later on.

ŧ

So we are very pleased to have these gentlemen with us this morning.

Our other efforts are moving along well. There is continued interest on the part of Congress and state legislatures in the whole issue. We have had two hearings recently. One, in the later part of April on Mr. Daschle's bill, HR 1961, which would presumptively service connect three conditions.

That is, chloracne, prophyria cutanea tarda, and soft-tissue

chloracne, prophyria cutanea tarda, and soft-tissue sarcomas.

I think that was a very interesting set of hearings. A lot of witnesses provided testimony and we will be looking at the results of that effort as time goes on.

We had oversight hearings before the House

Veterans' Affairs Committee on the third of May,

and we, I believe, are scheduled to have hearings

before the Senate. That date has not been settled

as I understand it. But, we are anticipating, at

some point in the not too distant future, of having

hearings before the Senate.

Our various research efforts are going along well. Our mortality study is moving along well and Dr. William Page will report to us, or will report

to the Epidemiology/Biostatistic subcommittee on the progress of those efforts as well as other research efforts.

I think a very significant event that has occurred since our last meeting, is the report of the Australians on their birth defects study. We have been asked by Senator Cranston, rather this committee has been asked by Senator Cranston in

a letter

Б

dated

April 27

to review this study.

Now, let me just read Senator Cranston's letter.

I think some of you have that in your package.

Dear Dr. Shepard: As you know, the Commonwealth Institute of Health University of Sidney, conducted a study entitled, "Case-Control Study of Congenital Anomalies and Vietnam Service." The report was submitted to the Australian Minister for Veterans' Affairs on January 24, 1983.

The study's conclusion, as stated in the summary of the report, felt that, "there is no evidence that Australian Army service in Vietnam has increased the risk of the birth of a veteran's child with an anomaly," is naturally of great interest to the members of the U.S. Armed

Forces in Vietnam concerned about any excess risk of parenting birth defective children. Thus, I would very much appreciate the Advisory Committee's review and comment on this study, particularly its evaluation of the methods used and the conclusions drawn from the data collected.

Thank you for your continuing cooperation with the Committee.

With best wishes, Sincerely, Alan Cranston.
So, we had planned to do that anyway, but, it's nice to have Senator Cranston's encouragement. So,

I would charge the committee to review that study very critically, and, provide comments back to me,

if possible by the end of six weeks.

I think some of you may have already had a chance to look at it. I'm not sure how many of the committee were mailed copies of it in advance of this meeting, but, I would very much appreciate each of your comments by the end of the first week in July.

I think it is very important. In that connection, we have been informed that the Australian government has appointed a Royal Commission to study the whole Agent Orange issue.

We just received word, officially, from the government of the Australia, that such a commission is being

assembled. As I understand the process, it will consist, primarily, of a ranking senior judge who will take testimony from a variety of experts and then prepare a report.

Another event which will occur sometime this summer, and we're not certain exactly of the date yet, but, we've been informed that Dr. John Donovan, who is the Senior Science Advisor to the Ministry of Veterans' Affairs, is a member of the Commonwealth and Institute of Health, will be visting the United States.

And, so, we are looking forward to a dialogue with him. We are hoping that we can set up some kind of a meeting for him to brief us on the current status of research in this area in Australia. I think it might be nice if we can assemble those members of the committee who can attend on an ad hoc basis, not necessarily as an official committee function, but, those of you who would be interested in meeting Dr. Donovan, I think it would be very helpful and useful, to all of us, to have such a meeting.

Are there any comments or questions from the members of the committee concerning efforts and procedures on the matter of our subcommittee meetings,

or any other comments from the committee while we are still meeting. We planned to reassemble at approximately. the agenda calls for 10:30, but I think we will push that up to about 10:45. So, if everybody will reassemble here after our respective subcommittee meetings at 10:45. 

We will then have a report from the two chairmen of the subcommittees as to the highlights of their deliberations and then we will take questions from the audience.

Now, are there any comments or questions from
the members of the committee now?
(Silence) All right. That
being the case, I think we will now break up into
our subcommittee meetings. Let's say the
Information/Education subcommittee will remain
in this room to be chaired by Mr. Mullen and the
Epidemiology/Biostatistics subcommittee will
move to room 139.

Let me read the list of the members of the committees for your information. I'm very sorry.

The following people will be on the Epidemiology/

Diostatistics subcommittee: Dr. Brick, in his absence Dr. FitzGerald, Dr. Cordle, Dr. Hodder, Dr. Lingeman, Ir. Kornreich in her absence, Dr. Moses.

2 3 4

The Education/Information Committee will be composed of Mr. Furst or Mr. Walkup who is representing him, Mr. Mullen, who will chair the committee, Mr. Sypko, Mr. Thompson and Mr. Woolsey.

(OFF THE FECORD UNTIL 10:45 AM)

MR. SHEPARD: I'd like to call the wrap up session of the final portion of our agenda to order.

I am remiss in not having introduced to you, at the opening session, Dr. Patricia Breslin. Dr. Patricia Breslin, who

comes to us from OSHA, is a very senior and experienced biostatistician. She is joining our research group. We are most delighted to have her

as a full time member of our research team. I
think we are very fortunate in that we have now Dr.
Kang and Dr. Patricia Breslin, and, we will soon have
a very experienced statistical programmer,

who

has had a lot of experience dealing with the ADP aspects of epidemiology. So, we are going to have a very nicely rounded out team. We are very fortunate thave them.

I would like now to call on the chairmen of the two subcommittees to give us a brief summary of what went on during the two parallel sessions. First of all, Mr. Fred Mullen, would you give us a wrap-up on

MR. MULLEN: Well, we had general free-forall and there was a lot of constructive criticism,
a lot of recommendations that went out, that came out
during our subcommittee meeting. And, a few of these
suggestions I would like to get into the record.

first of all, in the planned 7 city sessions, we felt that it would be best if we had a service organization representative there to evaluate the process. And, Mr. Woosley, from AMVETS said he has already made plans to have a representative of that organization present. And, Mr. Thompson and Mr. Sypko will get back to me this afternoon regarding participation of their organizations.

We want to get this underway as quickly as possible because of the imminence of the onset, or beginning of the sessions. They will be giving us feedback on each individual session as they progress so we can refine, add to, or take away from, the agenda of those meetings.

Also, the videotapes that are going to be made of those meetings, or sessions, we are going to try to get them out, not only to the VA, but to service organizations as well so we can present them to our service officers during our annual

conferences.

We felt that there should be more balance reporting in the VA pamphlets. We discussed a lot of negativistic reporting in the media. It's rather one sided. We also felt that the VA reporting was a little bit too positive.

We felt that both should give equal time to different views on the issues.

DR. SHEPARD: Excuse me for interrupting.

Did you come up with any recommendations as to how that should be implemented. I understand the problem. Did you make any suggestions as to how we can deal with the problem.

MR. MULLEN: No, we identified the problem.

DR. SHEPARD: I think we all recognize the problem. Obviously, we welcome your observation very greatly. I was just wondering if you had dealt with some of the means of dealing with the problem. Because that's very important.

MR. MULLEN: For instance, in the Agent
Orange pamphlets that are going out, Mr. Walkup, in
particular, pointed out that just
about everything that was being reported was the
positive results of certain studies and nothing
about the negative results of other studies.

And, we think that both sides of that coin should be portrayed and let the veteran's self evaluate the situation. Give him a little bit more insight. That's all we had time to do on that particular issue.

DR. SHEPARD: It's a good point and I hope that you can pursue that.

MR. WALKUP: There were a couple of specific things along that line. One, was on discussing the Agent Orange studies in Australia, many veterans know that the compensation procedures in Australia are different than they are here.

That wasn't mentioned in the article. What was mentioned were the results of the Australian's studies which reinforced the things that the Veterans Administration position on not having adequate information yet, about a number of areas.

DR. MCSES: How is the compensation different? In what way that it would affect an epidemiological study?

MR. WALKUP: Oh, the presumptive disability has been given for veterans who were in Vietnam from Australia, and, they are receiving compensation -

MR. WALKUP: Well, it's a presumptive

DR. MCSES: Just for having been there.

I mean, they don't have to be tied to anything?

2

disability, that, if a veteran dies of soft-tissue sarcoma, his widow gets compensated for a service connected item.

DR. FITZGERALD: I think it's a little bit

different than that. The situation in Australia is

that
the burden of proof is upon the government

to disprove, instead of the opposite that takes place
in this country.

DP. SHEFARD: I would question whether or not Australia has established any presumptive conditions. As far as I know, that is not the case here. If you have information, I would like to know about it.

MR. WALKUP: Well, I think that's a semantic difference that presumption means that the veteran's point is presumed until proved otherwise.

DR. SHEPARD: Okay. I thought you meant in terms of -

MR. WALKUP: More generic presumptive.

The way they operate is presuming that the veteran's case is true until proven otherwise. The way we are with Agent Orange is, we presume that there is nothing wrong with you until you prove that there is something wrong with you, in the case mentioned.

MR. MULLEN: All right. I figured we have

identified that there are definitely more difficulties in the conduct of examination and attitudes of the VA personnel in major metropolitan areas versus the rural areas. We would like, perhaps, to have, in future subcommittee meetings, a member of DM&S, in particular, a quality assurance person here, to consult and give us some insight into what and how they are approaching this problem so we can disseminate that information to our veterans.

Also mentioned, was the possibility of evening exams or Saturday examinations for the Agent Orange exams. A lot of veterans are in pretty bad financial straits right now and they are very reluctant or completely unable to take off work in order to appear for an examination.

We would like to ask the VA to look into the possibility of scheduling possible evening or Saturday examinations. We also discussed expanding the outreach efforts to other cities beyond the seven that are presently scheduled.

We'd also like a member of DVB here during our subcommittee meeting, in order to answer some of the questions regarding compensation or adjudication of these issues. In the registry mailing of the information bulletins and Agent Orange pamphlets, we

think that there should be more use made of the readjustment counseling available in the outreach centers. And, I think, that if we were to also send out a copy of IS-1 Fact—Sheet, which gives the addresses, or a separate listing of the addresses of the outreach centers, these veterans may be more aware of their presence and this would be more or less an invitation to them to come in if they should have any problems and seek help and advice.

Mr. Walkup asked if we could get a report on differences of the veteran's data on exposure.

'23

Mr. Walkup asked if we could get a report on differences of the veteran's data on exposure, explaining the differences between VA and EPA as far as exposure indexes, or, would you like to explain that a little further?

MR. WALKUP: Yes. specifically, what I
was asking for was clarification on the issue
of differences in EPA and VA scope of responsibility
and procedures in dealing with Times Beach and
Vietnam. And, what I asked for, was a specific delination
of responsibilities.
You know, exactly what is the EPA's role and exactly
what is the VA's role vis a vis environmental
contaminents, and what are the responsibilities to
their respective populations for assistance or
compensation, and what are their responsibilities
for levels of burden of proof that are required before

they can take a specific action? We've come up against that in generalities a number of times. I think we need some specifics to deal with that.

DR. SHEPARD: I'm not sure that we should necessarily respond to all of these right now because I think we ought to get through your -

MR. MULLEN: We like to, if possible, we would like to have that by the next meeting. We did identify a problem that's been long lingering, and that is, the veterans are rendering the same types of complaints about the conduct and the attitude of the Agent Orange examination and personnel.

They don't seem to be as widespread and we would like to know what the guidelines are for policing the Agent Orange examination for quality control between different VA medical facilities. I think that would be the purpose of also having a member of DM&S Quality Assurance staff present at our future meetings. That's all that I have.

DR. SHEPARD: Thank you very much, Fred.

I think we can take a few minutes to address some

of these issues. Dr. Hobson?

DR. HOBSON: I have a very minor, sort of procedural matter. In the first place, I think your idea of having various veteran's representatives

2

comment on each of the sessions in this outreach program is an excellent one. But I want to explore

the mechanics of getting the information to

us. Because the team will be passing directly from one
city
to another

any feedback should come to us very

promptly if you expect to change the presentations. All

I'm saying is that we ought--and we can, I think--settle

here how any comments are to come in; whether it's all to

come in to you

washington or whether it is to be delivered directly to our office from each of the representatives and, if so, to whom it should come so we can get it out to the field team in as expeditious a manner as possible.

MP. MULLEN: I did request that they not wait until the entire series of sessions is over, but, to make a report almost immediately following that particular session and get it in as quickly as possible. I don't know who you would want it sent to, but, I think, it would be best in the hands of the people who are going to be conducting those sessions so they can police themselves as they go

along, but, at the same time, we ought to have that information.

DR. SHEPARD: I would suggest two strategies to the upcoming seven visit. We will be available.

Part of the agenda, as you know, calls for us to interact with veteran service organization leadership as part of the process. And, in all but one of those cases, and I think there is a scheduling conflict, but, in virtually every instance, that session will be at the end of that particular location's program.

So, there will be an opportunity to have a wrap-up critique as we go along from place to place. But, in addition to that, I think it would be very good, as things are still fresh in their minds, of whoever is going to be doing the critiquing, to call back. Dr. Hobson will be here.

He is not going with us on the road shows, so he will be here and can receive any criticisms and then he will be in touch with us as we go along. So, we can hear from two points of view.

MR. MULLEN: I think Mr. Woosley has a recommendation.

MR. WOOSLEY: One of the things that didn't

get mentioned, or maybe it wasn't worthwhile, and

I strongly suggest that the VA medical director and

the regional office director, make direct contact

with the service organization representatives in that

area and ask them to attend.

Okay. Now, fine, I called my people and said

I would sure like you there. I realize it is in

the evening but you can take some comp. time. But,

now I find that, all of a sudden, we are invited to

the daytime aspect of it as well. Now see, I wasn't

informed of that by telephone yesterday, so I was

just told there was a meeting from 7:30 to 9:30 in

the evening.

Now, if the VA medical director and the regional director contact those people and invite them specifically, then they will be there for immediate feedback. They can say

well, maybe you

should have done this.

And, one point you forgot, on the agenda, there was no place for the veteran to be told how to implement what you are going to tell him he can have.

DR. HOBSON: That has actually been taken care of. Do you want to speak to that?

DR. SHEPARD: Part of the evening process

will be telling them how they get appointments for the Agent Orange examinations, how they can file claims,

and other important information.

MR. MULLEN: Well, we got the opposite of
that during our meeting. We were told that there
would be a counselor available, but he was not
scheduled to disseminate any information or to
address these veterans, unless the veterans came and asked
for it. And, our suggestion was that the counselor be
afforded
some opportunity to get up and tell these people,
as a group, how to proceed and give them some
direction.

DR. SHEPARD: Okay. Fred, do you want to talk. Mr. Conway has been doing a lot of the arranging, and he may have some comments on that.

MR. CONWAY: What we were discussing at that meeting, I raised a question of the program structure whether it was adequate or not. And, the criticism was made that we didn't have anybody on the program that would address the concern raised by Mr. Woosley. And, I think it is very easy to change things around a bit, and put somebody on the program.

And, the other suggestion that was made, I raised a question of whether we could get some feed-

back on the kind of information we're giving to employees to see whether we are conveying the message of empathy and understanding, compassion and not apathy and not criticism and so forth.

And, the suggestion was made, or I raised the question of whether it would be advisable to have veteran service organization members at that afternoon session. And it was the consensus of the group that it would be a good idea. So, we are going to now expand that -- a little bit by getting invitations out.

As I tried to say, the program is a very flexible one, and, it is one that we're trying to put together that will be responsive to the needs of the veterans and VA employees. In other words, we want to get responsiveness, criticism and feedback.

DR. HOBSON: My plea really is—can we set up a formal mechanism whereby each session's comments can get back to the participants on the team immediately so they have an opportunity to modify the presentation?

The best thing,

if I may make a suggestion, would be, that immediately following the evening session

the official representatives of each of the veterans organizations get together with the team and say, "This is what we think you are doing

wrong; or "This is what we think you are doing right."

There has to be pretty prompt response because the team is going to be leaving almost immediately to go to the next place and will want to get the criticism that they can use at the next place.

MR. MULLEN: But, I think, as an advisory committee, we ought to also get this information because, if the VA is planning an ongoing series of these sessions, I think, as an advisory committee, we would be better able to pinpoint areas where there may be potential problems, then those people that are there immediately.

DR. HOBSON: I agree with that completely. I was more concerned about getting the immediate word to them so there could be a reaction.

Barclay thinks there may be a better suggestion for doing that.

any means available to us to get the feedback. All I'm saying is, that there is, in part of the structure, an opportunity to do that feedback by service organization representatives the day after the evening session. So, that's sort of built into the program already and I don't have a special mechanism.

MP. SYPKO: Fred, what we could do is

just ask them to respond immediately and then contact us the next and then we can pass it on to you.

MR. MULLEN: Sure.

DR. SHEPARD: I think we need to bear in mind too, although we've done this kind of thing before, at other places, some time ago, we've never done it exactly this way before and, consequently, we are kind of feeling our way and seeing what system will work the best. And, it probably will work differently, better, in different cities. We want to keep it flexible.

point here, and that is, as Mr. Sypko pointed out, he surveys VA hospitals for VFW, and he went to 4 hospitals, I believe, in the midwest. Only one had an adequate display area and adequate pamphlets. The other three did not. It may be a problem of logistics getting them there, or, it may be a problem that they are there and somebody just doesn't know to put them out.

I think there ought to be some type of concerted effort to specifically identify the type of display that should be there and where it should be located and, to make sure, that these publications get out to the individual facilities.

Perhaps, through requiring them to respond upon receipt or non-receipt.

DR. SHEPARD: Is Mr. Moen still here?

All right. Because there is a definite plan to address that concern. It's part of Mr. Moen's plan to respond tothat specific complaint. So, I think that's being addressed, or will be addressed.

whether he mentioned it to you; they are going to have posters in prominent waiting areas, clinic areas, and so forth. The poster will have pockets for pamphlets. Individuals then can mail back requests for additional information, that kind of thing. So, that will be, hopefully, part of the solution.

MR. MULLEN: But again, getting them out to the hospital is one thing, but making sure they utilize it is another, and I think that's what we're mainly talking about.

DR. SHEPARD: We are intensifying that effort. Thank you very much Fred. I'd like now to call on Dr. Hodder to give a wrap-up of the Epidemiology/Biostatistic subcommittee.

DR. HODDER: Basically, our subcommittee looked at three areas. The first was the soft-tissue sarcoma. Ir. Larry Hobson gave an excellent

succinct summary of the association of soft-tissue sarcoma with phenoxy

herbicides, as published. He mentioned that the Swedish study had the relative risk of five to six times -- and we are obviously looking to see how well this hold up.

The problem mentioned in the discussion were with the study as well as the follow-ups and, of course, as all case control studies, problems of exposure, measurement and verification. Dr. Hobson pointed out that the Swedish study, in several follow-up articles, was pointed out to be methodologically weak. Also, as in any study, we like to see verification from other sources.

He specifically mentioned three areas. One, that we would look in U.S. areas using herbicides as evidence of a marked increase in this disease, and he mentioned this has not been shown.

Second group was some studies that were done to look at a similar type population in Europe.

Several of these studies were negative but, again, they suffered from the same methodological weaknesses.

And then, a third group, looking at the occupational groups that manufacture the herbicides, there is some support for an association with soft-

tissue-sarcoma. Dr. Moses summarized some of the evidence for that. The Monsanto and Dow experiences showing, -- -- somewhat higher than expected instances of those diseases.

What we still don't know, in either designing or interpreting studies. is the difficulty caused by the long latency period, ten, twenty years, which is, to me, an important aspect of the model.

What is exactly the model of the way this disease works, is a specific carcinogen along the line of the vinyl chloride

a promoter

would need to look at multiple Then, we Something -- like radiation or something that would put a general increase in tumors.

The other side of that is the problem with multiple exposures. The confounding problem--people not only worked in TCDD, they were exposed to many other chemicals, some of which we know are carcinogens. So, we have both multiple exposure and multiple outcome problems.

And, finally, the question of the heterogenicity. How do we categorize these diseases correctly? It was mentioned that we, although we can talk about

23

24

1 sard
2 And
3 sard

sarcomas, we don't know which of these belong together.

And, in fact, some people have included mangio

sarcomas apparently, and others have chosen

not to count such sarcomas. So we are without a clear biological indication of a unity of the group. We get into almost a semantic problem.

Second part of the presentation on soft-tissue sarcomas was Dr. Kang. He presented his protocol which the committee commendedhim on as being clearly written, well thought out. This is a study of soft-tissue sarcomas presented to the AFIP between 1971 and '80, I'm sorry, 1975 and '80.

So far, 1100 people have been identified as falling into that category. The discussion on protocol really centered on the issue, again, typical of the case control, a study of the problems of control. What is the appropriate control group comparison or the yard stick that we can use and this -- considerable discussion.

Dr. Kang protocol was to take a local control from the pathologist seeing the original case, he would pick, by a selective method, another case from his files, probably with a tumor, with a malignant tumor, one with and one without malignant tumor.

The advantage of this would be, obviously, it would be more representative of the population from which the case came. However, you would sacrifice control over the sampling process at the actual level of picking it. And, it may not consider the pattern of referral.

And, we talked about taking AFIP controls and then there was a discussion, actually, perhaps both were needed as has been done in situations where we take population and hospital control, etc.

One issue that was not discussed was, again, based on a need for comparability, was the question, should we exclude military hospital patients or not. That was not discussed this time.

The second area we looked at, and very briefly, was the Australian study of the birth defects. I mentioned, yesterday's meeting, the science panel also discussed Senator Cranston's letter. And, a member from the OTA specifically stated that she felt we should think in both the terms of the validity and the relevance. And, that was basically what we used to discuss this morning, to use it as a way of disclosing discussion.

The validity of the study, I think, is going to take more looking at and more information. Both, Dr.

В

2

Houk, yesterday, and Dr. Breslin have made comments that the information is incomplete to make it a thorough assessment of the validity.

The relevance of the Australian study to the policy makers in the United States, is another matter and, perhaps, more important, and three areas of concern there is, one, the paper itself says that exposure of Australian veterans seem to be fairly low. Dick Christian feels that this may not, in fact, be the case, but, certainly, that will be a very important in determining how relevant their studies were in the first place.

But, secondly, we have to recognize the perspective of the study. It's a limited look. It looks at one aspect of it, i.e. congenital malformation ascertained at the time of birth. And, must also be recognized that this was not then meant to be a definitive answer.

It may have been sufficient for the policy makers but the question of relevance here, would depend on what our people felt was important.

Then, the final presentation, Dr. Page presented the Vietnam mortality study that is underway at this time and reported to us what has been found to date. They are in the process of tracking records and what

they have found after 15,000 records, that they first identified.

When they looked at the record repositories they were able to find the record and also that the subject was eligible 85 percent of those.

Six percent of them, they were able to find the record, but since they were only looking at Army and Marine records, the person was not eligible, either Air Force or Navy personnel.

And, nine percent were, so called, hard to find category. There was, perhaps, some part of the identifier missing, etc. It's not that these records are absolutely lost records, but, that, on the first pass, on using the routine method, these were not found.

How much or how difficult, - how much will be able to be found, or how difficult this will be is not known at this time. But, nine percent is such a large number that it will have to be broached, at least, by sampling, as to how much effort and force it will take to identify the remainder.

Twelve percent of the records were found not to have the cause of death which will require going back to the states. We mentioned also, that -- the consultants that were fairly well known group of

Epidemiologists and Biostatisticians, made two recommendations that they over sample the deaths in lateryears and study size be increased to allow for more powerful sub-group analysis.

very much Dr. Hodder for
the excellent summary. I'd like
now, to just spend a few minutes on evaluating our
new subcommittee process. And, I will throw this
open to the full committee in terms of how they
think the process went and, perhaps, -- -whether it seems to be a good way to go and should we
continue it.

For those of you who served on Fred Mullen's committee, if I could get some expression of opinion as to the process and whether you think it is a good way to go and should we continue it.

MR. Walkup : I have a question to clarify the process. First, did I understand that the biostat. subcommittee met yesterday, also.

DR. SHEPARD: No. Let me just clarify it again. Dr. Hodder also sits as a member of the Agent Orange Working Group Science Panel, and that's the committee he was referring to. The AOWG and its Science

Panel are not

chartered under the Federal Advisory Committee Act since all the members are Federal employees. The structure of that committee is very different from this committee structure and, therefore, the meetings are not open.

Any other questions or comments?

DR. KORNPIECH: Since the subcommittee

system seems to work very well, people with

common interest working on the same problem, I

wonder if, perhaps, they have to meet more often

because it seems this agenda was very full with

programs -- and didn't allow much time for working.

The speakers were wonderful and it certainly was the right starting point, but, perhaps, there should be more time for committee work.

DF. SHEPARD: Yes, I have the same thought

If there was some way we could expand our

agenda to include time for more discussion. Maybe

we should consider spilling over into the afternoon.

We could take that up as a possibility. Any other

comments on the Education/Information

subcommittee?

MF. WOOSLEY: I would agree with your point for our group too. I found that talking out loud, the specific area that the program speaker was

В

addressing brought up a number of other issues that we needed to deal with. We were able to get to the point of identifying some of the issues that we needed to address next time and some of Mr. Mullen's requests for information were to take us to that next step.

So, it did seem helpful in that way. We had a concentrated block of time to look at one thing, we could start identifying issues, we could start setting up an agenda for next time, but, we need more time.

DF. SHEPARD: Do I infer from that, then we ought to consider having a morning and afternoon session? Would there be any strong-objections to our, at least, investigating that as a possibility?

I think that a number of other committees
that are comparable to this, do that. Some committees
meet for 2 days. I see no objection to
certainly looking into that.

MR. MULLEN: I think we ought to go to a full day session simply because, while, in my subcommittee we were able to address the immediate problems, the things that needed addressing now, as Mr. Walkup said, we couldn't get into the long term evaluation of the problem. And, I think that we need

more to time to adequately assess our position on the issues that we are charged with discussing.

DR. SHEPARD: Well, let's take that under advisement and then if that's the wish of the committee we will certainly look into the possibility. I see no objection to it. I don't think the administration will have any problem with it.

It's a matter of scheduling the rooms and the time, and, if people feel they want to devote that amount of time to it, we would certainly be receptive to that.

Okay. Any members of the Epidemiology/Biostatistics committee want to make any comments as to that process?

DR. MOSES: Well, I thought it was quite good actually. And, what I liked about it is, there didn't seem to be any barriers. I've never liked, in these meetings, sort of us sitting up there and them sitting out there. I like the idea that there is a lot of interaction between the people sitting out listening to us.

And, I think that is very important. And, the most important thing I think happened, is nothing passed anybody by. They had a question about something, we were able to stop and deal with it and

talk about it right then on whatever level. And everybody participated. I think it is one of the best meetings I've attended in this committee.

3

I like the idea of focusing, and, I'm also glad that the public is there. In terms of having a longer meeting, I think that might be a good idea because, I think, there is going to be more and more information to be evaluated.

We could have spend all of our session just on soft-tissue sarcoma. I think the reproductive area, we just talked about one study, if we had talked about what is known and what's doable, I think that could be another session. I, for one, if we are going to continue to do this, I think we ought to find out from the public people here too, how they feel about this because they've been coming too.

But, I think it's good. I like the approach, and I also think we do need more time. I agree with the other committee.

MR. MULLEN: Yes, we found too, that it was much more informal and spontaneous and there was a lot more interaction. As Dr. Moses said, we were able to stop and discuss a point and pick up where we left off, and I don't think it causes any particular degree of disruption. In fact, I think it was very

5

conducive to the general nature of our subcommittee.

DR. SHEPARD: Dr. Hodder, do you have any comments?

DR. HOLDER: Yes, I agree with Dr. Kornreich's idea that we need more time. I felt just about the time everything was getting interesting, I had to look at the clock and stop and move on to the next item. And, certainly the other point that Lr. Moses brings up, there was a lot more interaction. I think the points, both for us to clarify and advise you better, and, also, I think, to make sure your opinions are representative of the people sitting at the meetings.

I think both of those are best served by more time.

DR. SHEPARD: I'd be curious, I didn't spend as much time as I would like to have in the Education/Information meeting, was there very much audience interaction?

MP. MULLEN: In our meeting?

DR. SHEPARD: Yes.

MR. MULLEN: Oh yes, there was. In fact,

I had to stop the questions for a while, but,

it worked out pretty good. We were really cutting it

close at the end there. But, I think, we could have

spoken for at least another half an hour to 40 minutes on each subject.

DR. SHEPAFD: Well, that sounds good. I'm delighted that it has worked out well. This is exactly what we had hoped would happen. The fact that you need and want more time, I think, is very encouraging.

MR. MULIEN: I might add one more thing.

I think the topics that we discussed as opposed to the topics we discussed in the other subcommittee were much more easily dealt with by our subcommittee.

I'm sure that the people on the scientific panel here, don't understand a lot of what is going on as far as veterans benefits work.

And, I'm sure, we don't understand a lot of the medical jargon that happens in their committee.

So, I think it gives us a little bit more of a free rein.

DR. SHEPARD: Well, again, it is one of the hoped for outcomes. I'm delighted it came out that way. While I'm thinking about it, maybe we could ask the two subcommittee chairman to

draw of their respective agenda for the next meeting on issues they would like rather than me set the agenda.

I feel it would be much more important to have

you people set the agenda and we can work together.

Obviously, in assembling that information, we provide
the backup and the mechanical support, but, I think
it would be very good for the subcommittee chairmen
to work with their subcommittees in developing these
rather than having me do it.

I'd be happy to help in any way I can.

MR. WALKUP: On Mr. Mullen's last statement, I think that we do have a danger in getting specialized in our respective areas, that we stop understanding each other's jargon even though we may be able to inform each other at some point.

I've sat through sessions before so I can understand most of what you were talking about when you were giving your report, but, I think, after a couple more, I would not understand what it was that your group discussed.

I don't know how to overcome that unless we had more time. With more time it might be possible to have more lengthy overviews of what it was that each group discussed. Or, we might be able to send observers to each other's group or something like that.

DR. MOSES: One of the things, I think what you are saying is very important.

1 2 one of the things we ought to do at one of our 3 sessions, is, discuss just this very thing. And, just like you want to make sure you get feedback at 5 whatever you are doing, if we knew what particular 6 things people didn't understand or had problems 7 with and would like to know more about it, I think 8 that is one of the things that we could talk about

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Maybe we use too much

in the committee.

But, actually, jargon\_ we use the same jargon all the time. But, I think, that that is something that we definitely should consider.

I.f things do start to pile up, maybe,

I wish we could rearrange the table we could have better audience participation. I thought that was really critical.

DR. SHEPARD: Okay. Any other comments from the subcommittees?

MR. MULLEN: I have one more comment, Dr. I think this is the first meeting that I remember where, other than specific organizations expressing their beliefs of political views on this particular issue, in the past we've all just been involved in giving the perceptions of our particular organizations to the committee. I believe this is the first time we are going to actually have

participation in the field generated by this committee and veteran service organizations and I think that is crucial.

Sitting here and talking about it is one thing and talking politics is another, but, actually having involvement of our constituents in the field, I think, is very crucial to maintaining the reins on this whole situation, and, insuring that the wishes and the advice of this committee is being followed.

DR. SHEFARD: I thank you. That's a good point. Before we move into questions, we ask a quick recognition of a number of state representatives who are with us today. As they have in the past times, we have representatives from New York, West Virginia, Illinois, New Jersey, Texas, and did I leave anybody out. Excuse me, I thought I said it, Pennsylvania, yes indeed.

And, I'm delighted that you are here, and we want very much to keep you a part of the process. For those states where we will be visiting, we want very much your participation in that session where we will have an opportunity to discuss your particular issues as we go around from site to site. I think that has already been established, and I hope

it will work out very well.

Okay. I have a couple of questions. One is from a Mr. Wayne Wilson from -

MR. WALKUP: Excuse me, Ir. Shepard. At our last meeting we recommended that someone from the state commissions be appointed to this board. Could you advise us of the status of that recommendation?

## DR. SHEPARD:

Just to refresh your memories, the Administrator agreed to receive the name of three candidates who had had the endorgement of the states which have established commissions. To the best of my knowledge, he has not yet received that list of candidates, so -

MR. WILSON: I sent that 2 weeks ago.

We have carbon copies to every state, so, he's had

it for, approximately 2 weeks, I believe.

DR. SHEPARD: Well, I checked on it yesterday Wayne, and we have not received it. I don't know what has happened to it. I was aware that you had sent something because Ruth

from New York called me and said that such a letter was on the way.

I have made considerable efforts to determine where it is, but, as of yesterday, it had not come.

Leverett

₿

MR. WILSON: It hasn't come back, so-DR. SHEPARD: Well, we'll pursue it. I mean, it's not, by any means, a dead issue.

The Administrator has made this commitment and he's still open on it. We just haven't had any action or any names, yet, to act on. So, we are still waiting. It may have come in in the last 48 hours.

This is a question from Wayne. Is the physical examination given Times Beach residents different than that given to Vietnam veterans? If so, why?

I, for one, am not aware of the details of the examination. I have the impression that the examinations are not being done by any government agency. I think they are being contracted out to local physicians.

DR. CORDLE: They are being paid for the government, but it is local physicians that are doing all of the physicals.

DR. SHEPARD: So, I think it would be difficult to answer because we don't know exactly. My hunch would be that they are probably giving a fairly thorough physical examination. Probably doing indicated laboratory studies. Not too dissimilar from what we are doing.

MR. WILSON: Can we find out how, possibly by the next meeting, how dissimilar or similar they are?

DR. SHEPARD: I don't know how we get that information, Wayne.

MR. WILSON: -- EPA or someone on site down there -- or CDC. Somebody has to be monitoring it.

DR. SHEPARD: We can ask CDC if they have any standard methodology or guidelines. I suspect there must have been some guidance if this is a contract or reimburgement. Larry do you have some information?

DR. HOBSON: There were 2 or 3 on the scene. We asked Dr. Houk yesterday at the meeting precisely what they had done and what they found.

We got no answer. He said they were not prepared to release it as yet. Therefore, we do not have anything to report to you.

MRS. LEVERETT: I might have some bearing on that also. I contacted CDC and was referred to state epidemiologists in Missouri. I have been unable to speak to the gentleman -- --

DR. SHEPARD: I'm sure the Department of Health, at least as Times Beach is concerned, the

Missouri Department of Health has, in some way, been involved in this. I don't know whether it has been turned over entirely to the state of Missouri to conduct these examinations or whether it is being done by the CDC and the state of Missouri, I just don't have that information.

We can certainly try and get if for you though.

It is an important question and we need to know.

Representative O'Connell from the state of Illinois would like to address the committee.

MR. O"CONNEIL: My name is John O'Connell.

I'm a member of the Illinois House of Representatives and the chairman of the Illinois Agent Orange

Commission. I thank you for the opportunity to be here.

Listening to the subcommittees and the committee as a whole, I think you are on the right track, particularly with regard to the outreach program.

However, I think you are stopping. I get the impression that it will be a one shot approach to informing the veteran.

One of the most salient responses that we have gotten from our 8 hearings, public hearing throughout Illinois, is there is a very deep gap, credibility gap between the local VA hospital and the veterans

with whom they are to treat. The range of discussion has gone from down right animosity, to a feeling of lack of interest. It is our belief, that the VA can make some very constructive changes in that regard by making a permanent liasion committee, if you will, or perhaps, the medical director, or a member of his direct staff, the individual in charge of the Agent Orange screening program, a member of the local, traditional service group, and, certainly, a member of the Vietnam veteran organization that is not, perhaps, a traditional service group, but

As I said, I think the outreach program is fine.

But, it is addressed at a one city, one stop scope.

And, you've got to develop a better credibility in your field offices, in your field hospitals.

It isn't there.

does speak for the veterans in that area.

One other thing, this is on a personal matter, you are having the Chicago session June 28th, 29th and 30th, I believe, and you indicate there would be meetings with the legislative commission. I might point out, in terms of your scheduling, if, perhaps, we could be scheduled at some other time.

That is our busiest session of the legislature. We are in our closing week. We adjourn on June 30th,

and I can assure you, that no member of the legislative committee, commission, would be able to attend and we would desperately like to meet with you and convey what we've been receiving from our constituents. Whether that's possible or not, I just raised the question.

DR. SHEPARD Maybe we can work out something. Well, I certainly appreciate your comments Mr. O'Consell I think the point is very well taken.

It would be my hope that, as a result of this group of visits, and, I want to stress again, that this is not an isolated effort, we are trying this in various parts of the country and hope to see how we can best handle it, we have every intention of making it as part of an ongoing process.

It isn't a one shot deal. What I would hope to do in every place where we visit is, to encourage, both veterans groups, and our VA leadership, to develop a process for better interchange at the local level.

I have done this, personally, in some areas and it has worked very well. When I say, personally, I mean, I visited VA hospitals and encouraged this kind

of a process to be put in place. And, in areas where that has happen, it seems to have worked very well. So, the concept is very sound, and that will be one of my goals and that of my staff, to encourage that same kind of process to be developed all around the country. It is very important.

We are increasingly desirous, also, of getting the readjustment counseling program involved in this kind of liaison effort. And, they've already been doing it, we want to encouage it, we want to give them the necessary support, both, in their groups and, have that support received at the medical center level. So, there are lots of different areas that we can work on and hopefully they will bear fruit.

I certainly appreciate your comments. I think they are right on. Any other questions from the audience? Yes?

really a follow-up. I think a point that needs to be addressed by the committee is the question of compensation. All of this, presumably, is geared to lead to some policy decision, some time in the future, on medical care as well as compensation, and, I think it would be important to have a member of the committee, who is knowledgeable

about compensation policy and who can report to the members of the committee and the public about the standards for compensation decisions. In particular, how all the scientific information that is being discussed and will be discussed, perhaps, endlessly, might be used to make policy in the future.

So, I would suggest that there be a member or someone from the agency that can discuss that point. In particular, following that, I think it might be important, at least I would like to suggest, for the committee's consideration, that material prepared on that compensation policy, particularly with respect to compensation policies in the past be prepared. What I'm speaking about is the presumption bill Congressman Daschle has introduced, and, the question raised by that bill has to do with the agency's historical policy to award compensation on the basis of presumptions in the past.

I think it is important to take a look at, on a scientific basis, those presumptions that are now a matter of law. I think many people suspect the scientific basis for those presumptions are considerably weaker than the scientific basis may be for Agent Orange compensation. So, I would suggest that the committee, perhaps, resolve to ask the agency

for a report on that point.

The last point I want to make is I wonder whether the subcommittee: meetings will be transcribed.

I think, it would

be important to have those transcribed.

DR. SHEPARD: Let me answer your last question. We did tape the subcommittee discussions for purposes of being able to have a record of that. We have not yet decided whether we will go to the effort of having them transcribed. We can certainly consider that.

originally thought we'd
do was have the committee sessions
transcribed and have minutes of the
subcommittee meetings.

I think it is true that conversation flows more easily and if you are going to make sure that you catch every word that everybody says, both from the audience and from the committee, that becomes a mechanical inhibition to some degree to all that goes on. But, we will certainly take that under advisement.

It is a technical question whether or not we can tape and transcribe every word that is said by every person, because, not in every instance, people don't identify themselves when they speak.

MR. MILFORD: Well, if I could just- I, as a member of the public and a person involved in this issue for several years, I think it is very important to have a transcript of those materials.

I find minutes to be extraordinarily superficial and, usually, filled with jargon of whomever is entertaining that. Whether it be a scientist, lawyer, or a vet.

And, I find that it is much more useful to have the actual information that is being used.

Perhaps if you ask people to identify themselves, they should, in a meeting will help that.

DR. SHEPARD: It is certainly not an insurmountable problem. We'll discuss it.
Yes, Wayne?

MR. WILSON: I just have two points while we're talking about transcribing meetings.

I will certainly support what Mr. Milford said. I travel down here, I'm one person and obviously I can't be two places at one time, and there are scientists and medicals folks back in New Jersey who expect me to insure that they have a transcript, all be it, two or three months later to look at.

And, that's another problem, is we are not getting transcripts. As I understand it, the transcripts of last meeting are still not yet

available. I just think that it is very important to have these transcripts so we can advise our commissions and our constituents and have an opportunity to, hopefully, come here with some questions in terms of following up from last meeting. So, I hope we can improve on that.

It seemed to be very better in the beginning, and getting kind of down hill as we go along --

DP. SHEPARD: We will certainly look at that and see if we can speed up the process. Thank you.

MR. MILFORD: Can I get an answer to the first point?

DR. SHEPARD: Ch. I'm sorry. Give me your first question again.

MR. MILFORD: It has to do with the report or some information from the agency on the scientific basis for prior presumptions which are now in the law and form the basis for the basic compensation decisions.

I think it is important to have that kind of information so that the discusions about scientific evidence has some meaning. That, without that, a standard is really absent and it's impossible to have an educated discussion about where this scientific

evidence may go.

ŧ

pr. SHEPARD: I hear two aspects to your questions. I hear that you would like the commission to discuss and be aware of compensation policies of the VA. And, I also hear you asking for somebody in the VA who is knowledgeable in the VA's compensation procedures and policies to address the committee for purposes of informing them and the public.

I see no problem with either or both of those.

I would have to clear that, obviously, with our

Department of Veterans' Benefits to see how they

felt about providing that kind of technical

information support. But, I think it is something

we could certainly look into.

Was that it? You had another question?

DR. LAMM: Dr. Lamm from CEOH.

I'd like to give a bit of information on what I think is going down at Times Beach. I think the basic situation there, is that CDC has a contractor, has funds from the super-fund project which have gone by contract down to the state, the Missouri state Health Department where Dr. Denny Donal is running the program there.

He has contracted with outside services, within

the state for providing the health examination and has hired epidemiologists. And, in the process of doing so, for the purpose of collection the health examination reports which will then be collected in either Jefferson City or the Saint Louis area where they will be analyzed.

That whole process will be overviewed by the Center for Environmental Health at the Center for Disease Control.

DR. SHEPARD: That you very much for that information. That's very helpful. Yes?

Mr. Conroy from West Virginia.

MR. CONROY: Dr. Shepard, just one quick suggestion. I've received several inquiries from various vet centers located around the state of West Virginia, and these people are receiving inquiries relative to Agent Orange, virtually, on a daily basis. They've asked if it would be possible for them to receive copies of the update of the literature, the literature analysis, to make available to clients that they see, as I've indicated, on a daily basis? And, if it is a policy decision, I think it is something -- -- that should be pursued.

DR. SHEPARD: Yes. I'm not guite clear Chuck,

who it is that would like these?

MR. CONROY: Various veteran centers.

Vietnam Veterans Counseling centers that are located around the state of West Virginia.

DR. SHEPARD: These are state centers you mean.

MR. CONROY: These are VA centers.

DR. SHEPARD: Oh, VA centers. They are available to the VA centers.

MR. CONROW: Well, the VA centers in West Virginia haven't received copies of the analysis of the literature they have requested.

DR. SHEPARD: I thought we had sent them,
but I may be in error. Let me just

remind you that these are very

technical reports and, I think, they would have

relatively limited usefulness to non-scientists.

This is a very detailed technical scientific effort. Now, what you mentioned, is something that we have been wanting to do, have been thinking about, and that is to develop a somewhat less scientific interpretation of, or symmary, a lay language summary, if you will, of the results of those studies, or the results of those analyses. Certainly, some of the key elements.

\_

I think that is an important thing to do. We are addressing that, in part, in our monograph series, but those, obviously, have relatively limited frameworks. They don't encompass all the literature.

But, I think it is an important question and

I think that increasingly we need to do that.

I.t is a matter of getting the requisite funding and how it should be done, who should do it, and that kind of thing. Your point is well taken.

But as far as getting the literature reviews to Vet Centers, we have no policy that would prohibit them from being sent.

## Any other questions?

MR. O'CONNELL: I'm sorry Doctor, I forgot to mention one thing. Our Agent Orange Commission, myself, and Commissioner Maiman, met with the Illinois status for Women Commission. And, we discussed the non-civilian participation in the war, specifically, the Red Cross worker. And, the Illinois Legislature has adopted a resolution to Congress, asking that Congress include specified civilian, non-combatants in all studies of the Agent Orange question and all compensation that may be afforded to such specifics.

DR. SHEPARD: If I may react to that, and
I invite the other members of the committee to do so

also. I think your motives are very high.

When you get down to including these groups, these individuals, in studies, that begins to run a little bit head on into some rather basic epidemiological strategies and techniques.

I think it would be very difficult, for example, to include a group of Red Cross workers along with ground troops. I think that the Red Cross workers would get lost in a larger group. And, I think, what you would like to see is, what has been the impact of females, or other groups of civilians, serving in Vietnam, what's been the impact on their health.

I think that if there are some specific groups that need to be targeted, then I would strongly urge that studies be structured so as to answer those specific questions rather than, son of melting them in with a larger group. I think, we would probably come out with not the information that you want.

So, I would say, rather than including them in existing studies, or proposed studies, that new studies, addressing the specific questions should be encouraged. I would solicit comments from the rest of the committee to see if they agree with me on

that.

MS. MAIMAN: -- -- one of the points

we met with the White House on it yesterday, is the

inclusion of the Agent Orange testing and treatment

programs which exist. And, they supported our

contention that it really is

unfair to deny assistance to persons who experienced

risk because of their service

to their country.

And, I think the Illinois legislation will take that in consideration.

DR. SHEPARD: I think that's fine. I see no problem with that at all. You used the word study, and that was what I responded to, not

in terms of providing examinations or screening, and that sort of thing.

Is Mr. Christian here? I wonder, Dick, if you would be willing to share with the group, because I think it is an increasingly interesting point, or a point that is going to get more attention. Just a word or two about what your group is doing about trying to identify female veterans.

You want to just give us a quick update on that?

MR. CHRISTIAN: We have identified close
to 4,000 women who served in Vietnam, 2,900 of those
were Army nurses and the remainder were in the Women.

Army Corps at administrative and logistical jobs.

There are no automated records that provide that information to us. In fact, there were no records kept at that time to distinguish gender. So, this amounts to an extensive research of all the unit morning reports from Vietnam.

We hope to have that project completed within the next 12 to 18 months.

DR. SHEPARD: Thank you very much. I think that this is an area that will be, as I say, receiving increasing interest, and, I think that what Mr. Christian just told you, that for the first time, we are making, he is making an effort to identify groups of females who served in Vietnam, as a basis for doing epidemiology work.

Any other questions or comments? (Silence) Thank you very much for your attention. Thank you.

(Meeting adjourned at 12:00 PM)



## Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

Seventeenth Meeting September 1, 1983

. 11	INTERPORTED AND ADDRESS OF A STATE OF A STAT
1	UNITED STATES VETERANS ADMINISTRATION
2	+ + +
3	ADVISORY COMMITTEE ON HEALTH-RELATED
4	EFFECTS OF HERBICIDES
5	+ + +
6	
7	Veterans Administration Central Office Room 119
8	810 Vermont Avenue, N.W. Washington, D.C. 20420
9	Thursday,
10	September 1, 1983
11	
12	The meeting of the Advisory Committee was called
13	to order at 8:30 a.m.
14	PARTICIPANTS:
15	BARCLAY M. SHEPARD , M.D., Chairman
16	GEORGE R. ANDERSON , M.D.
17	THOMAS A. FITZGERALD, M.D.
18	HENRY SPENCER , Ph.D.
19	RICHARD A. HODDER, M.D., M.P.H.
20	CAROLYN H. LINGEMAN , M.D.
21	MARION MOSES, M.D.
22	JOSEPH MULINARE, M.D.
23	FREDRICK MULLEN, SR.
24	GEORGE T. ESTRY
25	CHARLES A. THOMPSON
	NOEL C. WOOSLEY
	EXECUTIVE COURT REPORTERS (301) 565-0064

'	INDEX	
2	•	
3	Opening remarks of Barclay M. Shepard, M.D.	1
5	Brief Reports of Recent Activities and Developments - Dr. Shepard	2
6	Report from the American Medical Association - John R. Beljan, M.D.	5
7	Outline of Health Studies Conducted in Seveso - Umberto Fortunati, Ph.D.	12
9	Reports of State Government Activities - George R. Anderson, M.D.	24
10 11	EPA Actions Regarding Dioxin - Donald G. Barnes, Ph.D.	35
12	Reports of Subcommittees - Mr. Fredrick Mullen, Sr.	43
13	- Richard A. Hodder, M.D., M.P.H.	57
14	Dioxins/Furans in Adipose Tissue Study - Michelle Flicker, M.D., Ph.D.	63
15	Comments and Discussion	69
16		
17		
18		
19		
20		
21		·
22		
23		
25		

## PROCEEDINGS

DR. SHEPARD: Good morning, ladies and gentlemen. I would like to call to order the 17th quarterly meeting of the V.A. Advisory Committee on Health-Related Effects of Herbicides.

We're very pleased to have you all with us this morning, and as we announced at our last meeting, this will be an all day session. We will have appropriate breaks, however. It was, I think, the unanimous decision of the committee that the meetings be expanded to allow more time to go over various issues and reports.

As usual, this is a meeting which is open to the public. We would request that all attendees register their presence in the outer room so that we can keep record of who attends.

We will, as usual, have an opportunity for questions from attendees. If you would please observe our convention of submitting your questions to me in writing, Don Rosenblum will be happy to provide you with cards which will enable you to do that conveniently.

I have a few committee announcements to make.

First of all, we received the resignation of Dr. Phil Kearney, very regretfully. Phil Kearney was a very faithful member of this committee and contributed immensely to its efforts.

He will be sorely missed.

EXECUTIVE COURT REPORTERS
(301) 565-0084

We have correspondence from the Department of Agriculture that the Department will continue to follow the activities of this committee very closely; however, they wish to withdraw as official participating members. I would hasten to say that, lest I mislead you, this committee is not composed of federal or non-federal agencies. It is composed of individual people who have been solicited for membership or have volunteered for membership for their own particular expertise and interests. So the fact that Dr. Kearney has resigned and the Department has chosen not to suggest somebody to replace him in no way hampers the committee's ability or the Administrator's ability to solicit somebody of Dr. Kearney's talents to be a member of the committee if that seems to be appropriate.

We're most pleased to have with us, not for the first time, because he's been here at many of our previous meetings, but for the first time as an official member of the committee, Dr. George Anderson from the State of Texas Department of Health. Dr. Anderson has very graciously expressed his willingness to serve as a member of this committee representing the interests and concerns of the Coalition of States, which have enacted Agent Orange related legislation. So we're most pleased to have you as an official member of the committee, Dr. Anderson.

As his alternate, the Administrator has appointed

Dr. Peter Kahn from New Jersey, and we're also pleased to have Peter as an alternate member of the committee, and I don't know whether Peter's here today or not.

He's been at the ACS meeting. Maybe he'll join us later.

We're also very pleased to announce that Dr.

Joseph Mulinare has been appointed by the Administrator to serve as an official member of this committee. We welcome you, Joe. Dr. Mulinare is not a stranger to this committee. He has appeared several times as an alternate for Dr. David Erickson, who has resigned because of his very busy schedule as the coordinator and director of the CDC epidemiological study.

Dr. Mulinare, as you know, has been very involved in the CDC birth defect study and is eminently qualified to be a member of this committee, and we welcome his presence.

We have a full and, I hope, exciting agenda. We are particularly pleased and honored to have with us today two distinguished visitors from Italy, Dr. Umberto and Dr. La Porta, who will be addressing both the full committee and the subcommittee on -- excuse me -- I misspoke. Dr. Fortunati and Dr. La Porta. I'm sorry. Umberto Fortunati.

Dr. Fortunati is a director of the Seveso project and has a wealth of experience and background which, of course, is of very vital interest to this committee and to

It was a great pleasure for us to host Dr. John Donovan of the Australian Department of Health. Dr. Donovan is a senior epidemiologist-advisor to the activities ongoing in Australia regarding the whole issue of Australian Vietnam veterans exposed to herbicides during their period of service in Vietnam.

It was a very helpful and, I think, important interchange of information. I'm sure most of you know that the Australian government has completed a hirth defect study, and Dr. Mulinare, I hope, will be prepared to make a few comments about that study.

Of course, it's of considerable interest to both us and to him as the investigator in the CDC birth defect study.

Of particular interest, I think, is the fact that the government of Australia has now appointed a royal commission to look into the whole issue of the possible human health effect of exposure to herbicides.

The royal commission will be headed up by a judge,

and they will begin their deliberations, I believe, very shortly. So Dr. Donovan brought us up to date in that regard.

I hope you've all -- I know that the members of the

₿

୍ଚ

also very particularly pleased to have with us representing the AMA, Dr. John Beljan. Dr. Beljan will report to us on the AMA Council on Scientific Affairs' activities regarding the programs and the work that the AMA has done to help put

I would like now to call on Dr. Beljan to give us a brief report on activities of his council. Dr. John R. Beljan.

PROPERT FROM THE AMERICAN MEDICAL ASSOCIATION
DR. BELJAN: Thank you, Dr. Shepard.

some of these issues into perspective.

It's my pleasure to appear today on behalf of the Council on Scientific Affairs of the American Medical Association, and I would like to begin by complimenting you on your efforts in this regard.

We, as you, are concerned about the concern of our several publics regarding dioxins and the other phenoxy herbicides.

And the mission of the American Medical Association, as we see it, and particularly the Council on Scientific Affairs, is to try to present to its constituency the best possible scientific information relating to the topic so that they may then use that information in the proper way to manage and treat their patients.

A number of people, I believe are totally unfamiliar with the existence of the Council on Scientific Affairs, and perhaps it may be useful if I spend a minute or

two with you about that before I tell you what we are about and we are up to at the current moment.

established to provide a definitive organized forum within the American Medical Association to look to state of the art activities, questions of scientific nature, and to be a resource body for the organization in the areas of scientific concerns. Since that council was established, it has been very active, and issued

a number of reports which have been, we feel, very useful to the practicing physician.

Approximately three or four years ago, as the controversy regarding dioxin and Agent Orange arose, a request was made to the Council on Scientific Affairs to prepare a report on this subject for the purposes of guidance to its physician constituency.

The council itself is a group of 11 members, who are elected by the house of delegates. Almost all have academic and/or scientific ties, and it also includes a member of our resident physician group and our medical student group.

We not only will prepare a statement for the physician regarding scientific questions on a larger scale, but also have recently developed a network which permits it to respond quickly to other questions, particularly in the area of technology or new applications, through

}

7,

, ۶

1.2

8 . **9** 

7

10 11

12

13 14

15

16

17

18

19

20

21

22

23 24

25

our so-called DATTA panel, D-A-T-T-A, which is an activity under the Council of Scientific Affairs designed to provide fast turn-around for areas of concern to our constituents.

We operate by developing ad hoc panels of experts appropriate in/areas for our formal report. And our report on Agent Orange and that task force is no exception.

Many of those members, in fact, often times as many as half, are not formal members of the Americal Medical Association, and they are selected solely in those specialty or advisory panels for their expertise and recognition for their expertise in the United States and, on occasion, internationally.

So we do have, in each of the areas that the council chooses to try to define the definitive and . state of the art picture, a series of ad hoc advisory panels, which will broadly represent the best thought in those areas.

We, at the present time, have a number of those panels operating in a variety of questions, and my presence today here/is because I am the liaison from the council to our ad hoc advisory committee on toxic substances, chaired that committee and continue to chair it.

As a result of the concerns of the physicians of the United States in requesting the council to address the question of Agent Orange, I think you are all familiar with

the report that was developed by the association in October of 1981.

We operate under the principle that we are not the initiators of new investigations. We are not the sponsors of scientific laboratory investigation as a funding or support agency, but rather, we and our expert panels are a series of individuals who are intimately involved with the specific matter in their normal activities. Their function is to survey the existing literature in the public domain and to make the best reasoned judgments regarding that matter to guide our physician population and the patients they serve.

That report, as you know, was a review at that time of the current status of information regarding

Agent Orange and dioxin. It ultimately became probably more of a position paper regarding dioxin than Agent Orange, and our focus to the present has moved more in the realm of dioxins, so that our subsequent report will probably feature, even in its title, an emphasis on dioxins.

We have had considerable interest regarding our activities. We've been asked on a number of occasions to testify. We have been asked by our house of delegates to update our report, and through and during the update of that report to provide information in some kind of organized way, which hopefully will continue to keep in perspective

B 

the overall problem of dioxins.

Our panel, which consists of seven individuals, reconvened for the first time since our publication of that report approximately two weeks ago. We are beginning to tool up for an extensive review of the literature and other information available to us at the present time,

We have decided that our most fruitful approach in responding to the demand of the House of Delegates has been, and will be, to concentrate on the important human epidemiological studies, some of which are in progress, some of which have been completed, and some of which will be completed, and to bring to our house of delegates a report in the spring of This will be next year for their June meeting a revised report dealing with our update of the information available to us about dioxins, Agent

Orange and related substances.

It will be our intent during that period of time to try to provide information through the regular channels of the American Medical Association. As you know, we have submitted materials to JAMA and elsewhere, and will continue to do that. We will continue to have our panel, the

ı

EXECUTIVE COURT REPORTERS
(301) 565-0064

council, and others available to discuss the activities of where we're headed. In brief, our intent is to try to expeditiously and appropriately update our report of October 1981, and on the basis of that, attempt to put into perspective this entire problem.

With that, Mr. Chairman, I'll be pleased to respond to questions.

DR. SHEPARD: Thank you very much, Dr. Beljan. It was a very nice overview.

Are there any questions from members of the committee for Dr. Beljan?

I'd be curious to know -- you may have mentioned it and it may have slipped me --did you have a time frame in which you were going to complete your update?

DR. BELJAN: Yes. Our panel is planning to meet on a monthly basis, at least, through the remainder of this year, and we hope to have a final report of our activities about mid-spring.

DR. SHEPARD: I've spoke to Dr. Beljan a number of times, and it's my understanding -- correct me if I'm wrong, Dr. Beljan -- that your report will include a kind of a synopsis of the various research efforts that are currently underway, and by then those which may have been reported out, and give a summary of what the conclusions are?

DR. BELJAN: That is correct. Yes. I have put together a simplified synopsis of where we are at the time that the report is concluded. I particularly appreciate having the opportunity to visit with you today, and to attend the meetings. 

/It will enable me to get an impression of the activities in which you're involved / the state of the art.

DR. SHEPARD: Are there any questions, then, for Dr. Beljan?

Well, we certainly appreciate your being here,
Dr. Beljan, and as time goes on, I hope we can get together
frequently, and we welcome this relationship. Thank you
much.

Next, I would like to call on Dr. Umberto

Fortunati to give us an update on activities in Seveso and discuss, perhaps, in some detail the health surveillance program.

Your agendas were titled, Conclusions from Health
Studies Conducted in Seveso. This is a little
bit misleading. These will not be the reports of the health
studies. This will be an outline of the health surveillance
program. I would hasten to add that Dr. Fortunati is
not a physician; he's a PhD., chemical engineer. His
principal role in this whole effort has been that of dealing
with some of the environmental concerns surrounding the

Seveso accident has -- to minimize the potential for that causing any long-term health problems.

So, Dr.Fortunati, it's a real pleasure to have you with us, sir, and we're looking forward to your remarks.

OUTLINE OF HEALTH STUDIES CONDUCTED IN SEVESO

DR.FORTUNAIL Thank you, Mr.Shepard. On behalf of

the Lombardi Government I'm representing here.

I wish to thank the Veterans Administration for the honor that has been granted to us to visit the United States and to look at the dioxin issue, which is a rather important one and very much being studied in these days.

To begin with, I wish to give a quick idea on what we've been doing in the last 3 years in Seveso. You probably know that the runaway reaction has taken place on July 10,1976 at the ICMESA factory in Meda, which is north of Seveso, and in such an accident were contaminated several houses and a wide territory downwind during about two and a half hours. The runaway reaction, lasted about this time, and when the contaminant was finally known, we have established a crash program to find out the extent of the contamination. And, ever since the Speciale Office established by the Lombardi Govern has coped with the consequences of TCDD contamination.

These efforts were made possible thanks to a law, a special law being voted at the Regional Parliement and in the law the appropriate funds have been allocated to take

care of the consequences of the contamination in the area. In the law a Task Force (about 140 people) has been put in condition to clean up the area, to take care of the social and damage refunding problems, and also of evaluating the contamination in the soil and the buildings and also, of course, in assisting in every possible way the population which was directly affected because, as you probably know, 735 people had to be relocated. They had to leave their homes and only about five hundred were brought back to their houses after one had a half years after the accident.

May I have the first slide?

This is view of the polluted area. You can see how heavily populated it is. At the top is the ICMESA factory which caused the damage. On the left of the slide you see the highway connecting the Milano with Como.

## Next?

This shows the subdivision and the three zones, "A" zone, contaminated, has been evacuated, the "B" zone, which has intermediate contamination, and the "R" zone, which --- has been established as a buffer area around the most contaminated area; around the Band A zones. The cloud followed a precise direction from North to the South.

And we've stopped making the analysis where we could not find more dioxin in the soil.

Next?

Ó

ŧ

I want to stress that our aim has been always to minimize the exposure of the population and of the reclamations workers.

The evacuation of population, whereven necessary, was used to minimize the hazard. To take care of the reclamation workers the Special Office has been very careful in screening the.

About 30 percent of the applicants for the reclamation jobs have been discarded because they didn't have the physical requirements.

This is --- the Decontamination Unit which has been established to take care of the entering into the contaminated area and coming back, you know.

In the first place, the reclamation worker received the protective material. They enter and -- put on the protective suits, gloves, boots, mask. When they come back, after 4 hours, they -- after having washed the boots take away everything, and them wash themselves.

Besides the boots, which are washed by the workers themself also the mask, are recycled 30 times and are cleaned by the Personell of the Decontamination Unit.

## Next?

This slide shows the kind of protective suits that we're using. They proved to be very effective, it's a

demonstration of how do we work in the contaminated area.

ધ

To keep down the dust we have been spraying continuously water to avoid the diffusion of the dioxin which as everybody knows, is bound to the soil. And this bind increases with time. The dioxin does not move from the

All around the contaminated area we built a fence 2.5 meters high. And this fence - which is of reinforced polyesther - has the purpose to reduce to a minimum the quantity of dust that may diffuse.

Next?

contaminated area.

Next?

What solution was endly adopted?

The controlled landfill.

These 2 basins are -- of 160,00 cubic meter capacity and 80.00 cubic meter respectively.

Both are lined with bentonite, clay mixed with concrete and sand, lined with high density polyethlene, and then filled with contaminated soil.

Some precautions are adopted in setting the soil inside.

The most contaminated soil and the chemical

equipment are in the center and the less-contaminated .: around.

When we clean up the area, we accumulate separately the several layers of soil that have been scarified.

The first layer is the most contaminated. It's separate.

The second, again, is stored in a separate area. And the third layer also in a separate area. When we do fill the basins in the center are dischanged heavily contaminated materials, all around the less contaminated.

Next?

Here is shown the "A" zone, which is now about 50% percent decontaminated.

The orange square area, represents the ICMESA factory, and the two yellow basins are shown under. We had to make two basins not only one as we would have preferred in two different municipalities, Meda and Seveso, Both Meda and Seveso didn't want to accept the dioxin of the next municipality.

We were compelled, for "political reasons" to Euild two basins.

North of the ICMEST is the neighbor municipality of Barlassina.

A south are the Cities Cesano Maderno and Desio.

£

.13

3

5

£

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Monday, when we come back to Italy, we have to establish the contractual basis to build a park in the A zone.

All the area will be available for/use after clean up work ended. The only places where we will not allow people to walk will be the two hills that will result after the filling of the two basins.

Next?

This slide gives an example of how we -- clean the soil, the method we have used, we dug, as you see, more than one meter in the most contaminated area.

hip curbs the people working within the The dirty area. After each passage with the spoon, it must cleaned carefully. Analysis must be done to check if the values that we had wanted to reach havein fact been reached and then start all over again, if we didn't.

Next?

This is the most contaminated part of the ICMESA factory. You can see two tanks where contaminated water is collected:in fact water is used to wash the protective material of the workers when they exit the contaminated area.

Next?

These are the most sophisticated protective units

Ģ

that we have been using. They are under air pressure and so we need a decontamination unit just next to the polluted plant. We need to carry the air pipe, and for practical reasons the pipe cannot be longer than 25 meters.

If the pressure of the air goes below a certain limit the alarm system will ring so the workers, alerted, have to come out. Two valves in the back keep the pressure balanced.

Should the protective unit -- break, the air will flow outside and not vice versa. The reclamation workers are fully protected.

Next?

Four windows were opened between the contaminated and the uncontaminated part of the plant, through the safety glass we follow minute by minute, the work inside the area and, -- thank to the comunication system, direct it.

Next?

These are the workers doing their job at the beginning of the decontamination work. You can see on your left-hand side is the reaction vessel wherefrom -- the runaway reaction that contaminated the area originated.

Now, all the plant has been carefully dismantled.

We put every piece in containers. The containers

will be put in the center of the largest basin, which has been shown before.

E

I think this is the end of it. Turn on the lights.

I wanted to emphasize the precautions we've been using in the Seveso area. We have no indication of any adverse effect to the health of the reclamation workers. The workers were examined before having the authorization to join the cleanup team. They are checked every month, if they are heavily involved in the work. -- After they give up the activity in the Seveso area the workers are checked a second visit is planned after 12 months.

Thanks to the protection that they've been using, we didn't have (any kind) of evidence of adverse effect.

About the health of the populations, if you permit,

I will read something from an official document of the

Special Office.

Five years after the TCDD accident, it is possible to see the final stages of the various projects that have been undertaken in an attempt to look for short-term human health detriments resulting from TCDD. Fears of multiple and massive manifestations of toxicity have not been realized. A review of clinical, laboratory, and epidemiological studies have revealed that so far the only evidence for a systemic toxic reaction have been the appearance of chlor-

acne in some exposed individuals.

ŧ

Some marginal effects that could conceivably be linked to the esposure are still being analyzed.

193 children contracted chloracne. Screened very carefully by Professor Puccinelli -- Probably you Know the work done by Prof. Puccinelli.

Evidence currently available does not, of course, bear heavily on possible delays or later effects of carcinogens --

To date, no excess of death or a particular cause of death has been discovered in the all municipalities under surveillance, about 220,000 inhabitants. Case by review of the 25 deaths of people who used to live, in Zone A, according to codes from death certificates, show nothing suspicious.

We had some indication at first glance to have a sample, a geographic cluster of certain categories of birth defects. However, the scientific committee devising the procedure, they conclude that the data available thus far show no birth defects that can be unequivocally ascribed to TCDD exposure. The possibility of detecting an effect in the future diminishes as the body burden of TCDD declines.

The registry, will be kept up to 1996, 20 years

<sup>(\*)</sup> Reduced from 25 down to 20 years.

after the event. As expected, no cancer occurred which might be attributable to TCDD exposure. From studies of other environmental human carcinogens, we know that latent periods are longer for cancer from ionizing radiation than from immuno-suppressing drugs for renal transplantation.

ó

ż

Ŷ

It was necessary to carry on this analysis and it will be done carefully.

On the occupational health, non effect from TCDD has been found on the reclamation workers, soldiers or public service employees.

The workers exposure at the factory is independent of the runaway reaction to which they were not exposed, unless they happened to be downwind on that fateful Saturday.

You know, that the contamination was blown through the roof of the plant outside the ICMESA factory. People inside had practically no exposure.

We didn't have any chloracne among the workers.

We had soldiers for a few years to control that nobody could break into the contaminated area; they were changed every three weeks. No one, really, has been exposed for a long time. The soldiers are difficult to trace after they leave the Army Studies on both adults and children today have not demonstrated any clear

association between health problems except chloracne from . acute exposure to TCDD.

I would say in conclusion that the only finding, so far, that can with certainty be attributable to TCDD is the chloracne. But our Epidemiological Team is going to continue the effort and will follow the risk groups. A first group's made by the people who have been affected in the B+A Zone. A second is constitued by the workers of the ICMESA factory.

The people involved in the reclamation activity constitutes the 3rd group. These three groups will be followed and compared with reference groups to check whether any adverse effects in the longterm does appear.

Thank for your attention. If you have any questions, I will answer to the best of my knowledge.

DR. SHEPARD: Thank you very much, Doctor.

Are there any questions from the members of the committee?

Dr. Fortunati has indicated, the Italian government is following up on these individuals. Of course, that's terribly important, and we in the biological sciences will be very interested in what those efforts reveal.

Any questions?

Ġ

ŧ

ì

3

5

6

7

٤

¢

10

11

12

13

14

15

16

17

31

19

20

21

22

23

24

25

Dr. FORTUNATI: We would like to exchange information viz a viz the interested agencies in the United States because this will help to increase our knowledge and make more valuable judgment on the results.

DR. SHEPARD Certainly that's the case, and we would welcome such close association.

Dr. Fortunati will be here for the scientific subcommittee meeting and will be available for more questions at that time from the members of that group.

I would simply like to ask, if you have the information, Dr. Fortunati, you said there were 191 children?

DR. FORTUNATI: 193.

DR. SHEPARD: 193 had developed chloracne. Do you have any idea -- and they were all in Zona A, right? There was nobody outside of Zone A?

DR. FORTUNATI: No, Zone A and Zone B.

DR. SHEPARD: And Zone B. Do you have a rough' idea what the populations were at the time of those two areas, A and B?

DR. FORTUNATI: I would say about 10,000.

DR. SHEPARD: 10,000.

DR. FORTUNATI: About equal the ones that were nearest to the factory and the effect, I think, was the combined effect of the mixture of chemical with the cloud. And the dioxin. The dioxin was diluted in large quantity and those possibly had dioxin by eating the vegetables from the gardens. Each house has a garden and everybody is cultivating vegetables.

So I think the TCDD assumption was through two routes, by inhalating the cloud and by eating the vegetables.

DR. SHEPARD: Well, thank you very much for that report. We're looking forward to your comments at the subcommittee meeting. I'd like to call on Dr. George Anderson from Texas to give us an update on various state activities.

REPORT OF STATE GOVERNMENT ACTIVITIES

DR. ANDERSON: As you most likely know, in the 18 or so states which have a program or commission, it's hard to put together exactly what all of the states are doing.

Last evening we had a meeting here in town which representatives from New Jersey, West Virginia, Pennsylvania, Minnesota and New York and, of course, myself met. We discussed our various programs to some extent. However, we are knowledgeable — fairly knowledgeable, since we've had a considerable amount of correspondence back and forth over the last year or so.

At the meeting last night, we looked at ourselves a bit. We felt that at times we had, or course, been accused of prejudgment, which is understandable. The veterans'

organizations, which in most states actually sponsored or put through the various state legislatures the various laws setting up the programs, tend to make the state programs and commissions advocates of the veterans. The VA, of course, itself is an advocate for the veterans.

We discussed the VA Agent Orange registry. We appreciate the mail-out of the registry to the states which have requested it. I received mine in Texas two weeks ago. There were some 4,400 names in our registry in Texas.

Because in the State of Texas the fiscal year begins the lst of September, we didn't have the necessary postage at that time to put out a mailout.

We discussed the GAO report and we feel pretty much as a consensus, the group, that there should be a follow-up to that report. We haven't heard very much and we would like to have this done.

We would, as the follow-up perhaps, if a new team is selected to make some visits, that a physician be on the team. We were concerned because the report showed more methodology than results. We are more concerned with what has come out of the program than the way in which it is being conducted.

We, as a group, encourage the veterans in various states to contact the VA and take advantage of the Agent Orange physical. That's all.

The individual programs have become more active. Pennsylvania is rapidly moving. They are funded through going 1984 and are/in for a three year extension, which they have every expectation of receiving. They are developing their mailing list, and shortly will be in contact with their veterans. They have a questionnaire under development which will be sent to the veteran. I think most of the programs tend to use the questionnaire method of contact with their veterans.

We have bad news, as well. The New York Commission terminates as of the 30th of September. We have no more to say on that than that.

The West Virginia program is rapidly developing.

The folks in that program paid a visit to Texas a month or six weeks ago; spent—two days with us. They met with the six individuals at the University of Texas who are carrying out the medical research of our program. And the next day they came to Austin where they spent a day with us, taking a look at how we are developing the epidemiological component of our program.

Those of you who are not familiar with the Texas

program realize that it is a joint program between the

Texas Department of Health and the University of Texas

system. Three of the health science centers within the UT

system have developed protocols and are working very closely

with the Department

1

2

3

5

ò

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

with the Department. / department is the administrator of the program. The University of Texas scientific group/are in contact with the veterans, who carry out their in part of the studies, which are a form of protocol which I think, you are probably already aware of.

The

I received correspondence from the State of Hawaii. I will read part of the letter which they sent to me. is from Will Rellahan, Ph.D., who administers their program in their Department of Health. "We have established an Agent Orange registry in which are stored reports of the symptoms, diagnosis, and treatment of medical problems which patients attribute to exposure to herbicides in Southeast Asia. We have conducted a health survey in which the conditions of their residence in volunteers describe Southeast Asia, /indicate their estimation of the degree of their exposure to herbicides during the period of residence, and describe any subsequent medical problems they remember. The result of this survey (to be published in the fall of 1983) led the Hawaii legislature to extend the life of the Agent Orange program until 1985, and requested the extension of Agent Orange health surveys in such a way that a random sample of Hawaii Vietnam veterans population would have it's health compared with that of a corres-

ponding sample of the remaining Hawaiian population.

to interconnexament tunimed about to interconnexament tunimed about to interconnexament tunimed about the interconnexament tunimed area.

: €

: 9

to be numbered among the states which have taken an active interest in the problems of veterans in Southeast Asia conflict. Our program, in addition, has included an examination of the medical problems of refugees from Southeast Asia who might have been exposed to herbicides. Unfortunately, so few of these people have volunteered for the medical problem survey, that no conclusions can be reached about their health relative to other members of the population. Yours sincerely."

We have started the latter task. We are pleased

I also heard from the Illinois commission. They are not here today at this meeting. They are planning a meeting / the 24th and 25th of this month, a meeting of the States program and Commissions in Illinois. Which I am sure, Dr. Shepard already knows about.

I'd like to, at this time, talk a little about the Texas program. We are now two years old. It started on September first, 1981, following the passage of our law at that time. We were funded to the extent of \$500,000 for the biennium. Most of that money, have to report, was utilized. The program is a joint program between the . Texas Department of Health and the University of Texas. The Department receives the money which goes on contract with with the University to carry out their studies.

The veterans contact the Texas Department of Health directly

through their physicians. One of the requirements is that the veteran have a medical condition which he attributes to exposure to Agent Orange in Southeast Asia.

program. We anticipate, by next year at this time, we will be up to about 650. The veteran coming into the program, of course, fills out a questionnaire. We then, contact St.

Louis at the repository and get his military records, both medical and personnel. We also contact the Veterans Administration if he had Agent Orange physical, and get a copy of that and all other medical records which are on file with the Veterans Administration.

We also contact all civilian physicians/whom he has had contact since Vietnam. We get all hospital records, if he were hospitalized. We build a very large file on each veteran. We then make an estimate of his exposure in Vietnam. I might say that we get good cooperation from Mr. Christian and his group in determining the exposure of these veterans.

An exposure index is developed, which actually amounts to primarily, was his unit in an area in which there was spraying activities during the time that he was there and of his account of the situation that took place while he was there. Many of them, of course, do present their version of what happened: backpack spraying, the use of helicopters,

and various other methods that were used.

We have an advantage in our work, because we are in direct contact with the veteran. We can discuss, at any time we want to, any part of the questionnaire, by phone call. Some of them come into our office, sit down, and discuss things with us.

Once we have worked out the exposure index (and not all of them, of course, were there when there was heavy spraying) his case is presented to a selection committee in Houston at the University of Texas Health Science Center; made up of six individuals who are carrying out the various studies.

We determine whether or not the individual is eligible. If he has been a welder, and worked at petrochemical plants, and worked in agriculture in Texas where they use a lot of 245T, he is not eligible for our studies.

To date we have selected 85 individuals to study. We also, at the same time, select controls. The controls are selected several ways. Either through the buddy system of the veteran, naming two or three individuals for us to contact, and to look at as possible controls; through the various veterans organizations; and through the Texas National Guard, looking for individuals between the ages of 30 and 40 years of age. We have, so far, been able to draw blood, and get a sperm sample on 44, which have been sent

**4** 5

6

. 9

10

11

13

15

16

17

18

19

21

22

23

25

to the University of Texas. The reports are now coming and back to my office. This includes 44 veterans appropriate controls.

We hope by the first of the year that we may be able to break the code. Take a first look at the first 85, to see what we're going to find. The studies that we're primarily carrying out now are immune suppression profiles, lymphocyte cytogenetics (chromosome breaks in peripheral blood), and sperm studies (primarily looking for Y bodies and other breaks).

The individuals at the University of Texas do not know who the controls orveterans are. All they receive, the only contact they have, is/sample of the blood and sperm which they process. They're very anxious to break the code. We will decide by the end of the year the method we will use in breaking to see what we have. Realizing these are pilot studies, which should give us some direction, and we're particularly interested in developing some methodologies for evaluating all individuals exposed to toxic agents. And, as you know, Texas has a large population which has already been exposed in the petrochemical industry to the same agents. / Our health department is very interested in working out a program with the University of Texas , as problems of Agent Grange and dioxin diminish, to continue on in a civilian endeavor to carry out

similar types of industrial toxic agent exposure studies.

We are funded this year for \$300,000 and \$300,000 for the second year of our biennium. Our legislature is expected to continue the program until we have certain resolutions. I believe that's about all I have to report today.

DR. SHEPARD: Thank you very much Dr.

Anderson, a very nice run-down of the State activities.

And we're particularly pleased to hear more details on your home state's epidemological efforts. Are there any questions from members of the Committee. Yes, Dr. Moses.

DR. MOSES: Is this on, can you hear it? I was just curious, you said in your sperm study you had 44 veterans and appropriate controls. I'm curious who those controls are and how they were selected.

DR. ANDERSON: They were selected through the buddy system, or through a veterans organization where giving us the names of controls--

DR. MOSES: You mean they were selected by the veterans?

DR. ANDERSON: They were only named by them. They were not selected by them. We eliminate many of the controls, because of their exposure occupationally to factors—various/ such as welding, agriculture, and so forth. These are individuals who are not, were never, Vietnam veterans.

θ

Some of them are veterans who served stateside and in Germany or other places. We matched them, of course, through the usual match, age and the rest. We do the best that we can. Controls are a very difficult thing. To select a control, you have to go through several in the process of selecting.

DR. MOSES: And I was also curious in the 44 veterans who you say--are they all from one geographical area? Or, are they from all over the State of Texas, which is huge?

DR. ANDERSON: They're all over the State.

DR. MOSES: I see.

DR. ANDERSON: We work very closely with our local health departments in drawing the blood, and getting the samples, and with project clinics and physicians; we'll contact in any way we can to get the samples, and-

DR. MOSES: Is the same lab going to do all of the samples?

DR. ANDERSON: --and the same lab is doing all of the samples. The sperm studies are being done at the Medical Branch at Galveston; the cytogenetics at M.D. Anderson Cancer Center in Houston; and the immune suppression studies at the University of Texas Health Science Center in Houston.

DR. SHEPARD: Any other questions for Dr. Anderson? You may have said it, George, but I didn't catch it, how many people you're aiming at, in terms of studies, subjects, and controls. Ultimately do you have a cut-off point? DR. ANDERSON: We hope to have tional 50 added to our study during this next year: 50 to each one of these three studies. This is due to funding limitations: high cost. For instance, an immune profile costs us \$933.00, and then you have to multiply it times two, because of the control. So our

an addi-

from rather

SHEPARD: Well, thank you very much Dr. DR. Anderson. I hope you'll be available to meet with us for a portion of at least, the Science Subcommittee. Because I'm sure there would be some more specific questions on some of your testing procedures, and so forth.

contract with the University of Texas for the immune study

itself was \$93,000 for that study alone. That will only

cover 50 veterans. Of course, just the shipping of the

specimens from/Texas to the University system (they must

remote areas) cost us a lot of money. The Federal Express

throughout

get there within 24 hours

people are in business in Texas.

I'd like now to call on Dr. Donald Barnes of the Environmental Protection Agency, whom I hope, will give

22

23

24

us an update on what the EPA is up to in the dioxin arena. Morning Don.

## EPA ACTIONS REGARDING DIOXIN

the Committee, and members of the audience. Environmental Protection Agency has been involved with dioxin concerns of a variety of types, since the early 1970s. Our initial focus was on the herbicide 2,4,5-T And this occupied our concerns through most of the decade of the '70s culminating in 1979 with our emergency suspension of certain uses of the herbicide. and initiation in 1980 of litigation to cancel all uses of the herbicide. That activity is ongoing at the present time. But since that initial effort focusing on 2,4,5-T the issue of dioxin as defined as 2,3,7,8-TCDD has broadened, as has the definition of the term dioxin itself.

We are now concerned about the presence of all 75 chlorinated dioxins in the environment. And increasingly concerned about the dibenzofurans, as well.

Given the recent changes at EPA in terms of the higher management in the past six months. There has been a refocusing of our activities in the area of dioxins and furans.

The Deputy Administrator came in, and after about a month or so, saw that the concerns of dioxins and furans, had broadened well beyond the initial focused 2,4,5-T. interest in Subsequently we all received in that time period, a petition from citizens from the State of

Michigan asking for a full-scale field investigation, is the term they use. To investigate the potential pollution which they were suffering in Southcentral Michigan.

In response to that citizen's petition, a crossagency effort was brought together under the direction of,
or at the behest of, if you will, of the Deputy Administrator.
And out of that, people began to see that if you're
talking about dioxin contamination, you're talking not.

2,4,5-T
only about but you're talking about possibly incineration sources, and other types of activities as well.

In responding to that citizens petition, and with the encouragement of the Deputy Administrator, the--management of EPA has developed, what they refer to as a dioxin strategy. This strategy has been formulated over the past two or three months, and is now out for a limited outside review. We hope that within the month of September, this will be finalized and will be presented to the Administrator to allow him to make his decisions, and announcement of whatever it is regarding the dioxin strategy.

Therefore, while I cannot speak definitively about what the details of the strategy are, I think I can mention some of the possible and probable complements of that strategy. Our experience in Missouri and Newark and other such places as that, have indicated to us that an area of real concern is associated with dioxin, around and

associated with the previous production of 2,4,5-T and 2,4,5-trichlorophenol. The best of our information, these chemicals are no longer produced in this country. However, the facilities which had produced these in the past, still exist. And there seems to be a need to, at least, go back and check at several of these facilities to determine whether or not there is harmful contamination.

This, if you will, was the source of contamination in Missouri. Back in the early '70s, a manufacturing facility that was involved with making 2,3,7,8-TCDD contaminated materials, was the source of material which were then spread over certain portions of Southern Missouri.

So, the idea is to go back and look at the finite number of plants which were involved in those kinds of manufacturing processes in the past. Associated with the manufacturing is not only the site itself, but also the question is what happened to those wastes. Again, this is what the problem turned out to be in Missouri. That the wastes were disposed of in what we were term now euphimistically perhaps as a injudicious way of disposal.

The question is whether or not other facilities that were involved in similar types of manufacturing had similar problems with disposal of the wastes in the '70s. So this activity is being focused in, under our Office of Solid

Waste and Response. There has been certain guidance already

sent out to the regions. The regional offices have a great deal of autonomy in the structure within EPA. And guidance is being sent out to try to coordinate this activity.

In addition, if you will, going to the next layer of concern is, people have suggested that we might not only want to look at people who not only manufactured it, but people who formulated it into various products. Again, some of our regions have already—and some independent states have also taken activities—taken action to look into this area.

Our concern here is to try to coordinate the activities so that everyone moves along in a pretty well coordinated fashion.

As a consequence of the response of the Michigan citizens there was considerable interest in Congress that the Agency somehow respond positively to the suggestion of a full-scale, or full-field investigation. This has resulted in bills introduced in Congress to encourage the Agency to conduct, what has been termed, a National Dioxin Study. And there is a certain portion of the strategy that deals with this.

You know, what form should that take? And how will it be dealt with, and so on? There is great Congressional interest in this. And we are in the process of trying to work out the details of it. Certain components of it,

В

₿

though, have been suggested in the past. And some of these 2,3,7,8-TCDD deal with in terms of where it happens to be in the environment in terms of air, water, fish, soil, and so on. So, there's been some concern, that in the past, we really don't know what the background levels are of this particular chemical in the environment.

We do know that there are certain samples reported at the American Chemical Society, yesterday; and there's already appeared in the literature before, dust taken from certain areas of the country which we don't necessarily know to be associated with manufacturing and so on, have been reported to contain trace amounts of various chlorinated dioxins, not necessarily 2,3,7,8.

Part of our concern then would be, or one recommendation has been to try to figure out what the background levels are. Another area of concern, that has been raised on the international scene, has been incineration as a source of dioxin contamination. This would involve the incineration of hazardous wastes, which we've looked at in some regard; and incineration of municipal waste.

The Agency has a program ongoing to look at these activities, but it might be a need to broaden this interest. I know that this is an interest to various states, and the City of New York and others who are involved in building incineration facilities, then, that is determine to

what extent there is a problem, and if there is a problem how to minimize it and solve it.

In addition to these activities, which have
2,3,7,8,
focused, will focus initially on the broader
scale of looking at dioxins and furans is one which
we recognize as something we've got to deal with. And
there is an effort underway right now, to see if we can
sort of focus more clearly what activities we
would have in that broader arena.

The concern is not to get ourselves boxed in, to just doing what seems to be the problem at the moment, but to get ahead of the curve, and be able to address some of those concerns that we think we'll be coming to us in the future.

The strategy itself, as I say, is not yet a public document. However, the Office of Water and Environmental Protection Agency has a limited number that are available to certain environmental groups, industry groups, and other government groups. People in the Office of Water and the Office of Solid Waste and Emergency Response I believe, would be happy to answer general questions about the strategy. You can look forward to it, as I say, coming forward we hope, by the end of the month.

DR. SHEPARD: Thank you very much, Dr. Barnes. I think, any questions from the members of the

, 9

Committee for Dr. Barnes? Dr. Moses.

DR. MOSES: Yes, I'd be curious, I think this is an excellent idea as far as looking at dioxins and furans together. And I would be curious as whether or not the Agency is considering the most widely used environmental chemical now, is pentachlorophenol which has both dioxins and furans in it, although not 2,3,7,8. Are there any plans to include either pentachlorophenol

particularly since about 40 million pounds a year are being used? And that might be a rather important area to look at, at the same time. Is that being considered?

DR. BARNES: It's not only being considered,
part of, if you lay this problem out, if you will, in terms
of an onion. At the nucleus the onion would have 2,3,7,8-TCDD,
and we have all the other dioxins, all the other tetras,
then all the other dioxins

and furans. And there are a limited number of resources. So, the current thinking seems to be, well we ought to try to focus where we see the bigger problem.

And where pentachlorophenol will hit, I am not quite sure. I don't think, though, we would limit strictly to penta, because there are other chlorphenols as well.

We see that as a--

DR. MOSES: That's my next question. That's the other question I wanted to ask you.

I thought you said that trichlorphenol is no longer being manufactured. I assume you mean 2,4,5-trichlorphenol?

DR. BARNES: Yes.

DR. MOSES: Now, 2,4,6-trichlorphenol,which used to have wide use as a germicide I assume, is being manufactured. And that's very, very widely used.

And I was curious about that statement. And is no trichlorphenol being made? Hexachlorbenzene is, I mean, hexachlorophene is still being made, and this is the feeding stock for it. I thought it was still being made.

DR. BARNES: 2,4,5-TCP, which is used in this country,

DR. MOSES: Coming from ICMESA, used to.

DR. BARNES: No longer, no longer.

DR. SHEPARD: Any other questions for Dr.

Barnes? If not, I would now like to announce that the two subcommittees will now meet. The Subcommittee on Education and Information will remain in this room. And the Subcommittee on Epidemiology and Biostatistics will convene in room-139, which is just down the hall. And let's try and convene within the next six minutes or so. Then we will break for lunch and reconvene at 1:50 or thereabouts. Thank you.

(The meeting was recessed, but did not reconvene until /2:28pm, this same day, Thursday, September 1, 1983.)

# AFTERNOON SESSION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

2:28 p.m.

DR. SHEPARD: First of all, I'll call on Fred Mullen, and ask him if he would give us a synopsis, several highlights of deliberations of his subcommittee, and then I will ask Dr. Hodder to do the same.

Following that I will ask Dr. Michelle Flicker, on my right, to give us a run-down of what has been going on, not as part of this Committee's actions, but As another very important deliberative effort. you probably know, the American Chemical Society has been meeting meeting here in Washington. That/ has afforded the V.A. the opportunity to bring some of the biggest minds in the world together to discuss some of the aspects of a very important study that we will be conducting in conjunction with the Environmental Protection Agency. That is the analysis of human adipose tissue for dioxin. And we'll have a little more to say about that later. But Fred could you kick it off for us, please. REPORTS OF SUBCOMMITTEES

MR. MULLEN: We had another free-for-all. I think it was productive in some aspects, informative in others. But we did again, identify some very obvious problem areas. There does not seem to be a V.A. policy in policing the Agent Orange examinations that are conducted. The way the examination is conducted now, there are certain routine

laboratory tests that are conducted. And other laboratory tests that are conducted, if necessary. I think we have reason to believe that there are examinations that should be done which are routine, and are not being done, even when clinically indicated; or, based on the medical history.

We were advised that at least one V.A. hospital's accreditation is hanging in the balance, because of their Agent Orange examination program. And we believe, that if this, if the accreditation of an entire hospital, hinges on the quality of the Agent Orange screening examination, that you can find similar variances in other V.A. hospitals. I think that you ought—that we ought to institute, if necessary, another committee, in addition to the I.G.'s or whatever, that goes out. Rather than wait for the I.G.'s V.A. should team to go out there and investigate a hospital, have a specific team go out and police specifically for the Agent Orange examination.

Immediate, and I think everybody knew this was going to come up, while the administration may have stated a disclaimer as to the information reported to the various media, that the statements made indicated that they were the results of a review of data by the administration, rather than a major study. In some instances the media picked it up, and did describe it as a major study. But we felt that the onus should be on the administration to either

₿

H

2

3

5

6

. 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ask for a retraction, or to ask for clarification. And, if nothing else, buy space and inform the veterans that the information reported was erroneous, / taken out of context. CDC is experiencing, or is expecting to experience some difficulties in locating both veterans and cohorts for their study.

One article, in particular, indicated that there are a million people in the general population who have had exposure to dioxin, and 85,000 possible cases of dioxin exposure of veterans in the Agent Orange registry. this gives the impression that the administration and the government has already made up their mind that there is nothing here. And, if that is the case, why would a veteran want to take three or four days off of work, possibly lose his job to do it, or suffer loss of wages, if he has the perception that the Government has already made up their in the CDC study? mind. Why participate/ I think the onus is on the V.A. to clarify any errors that occur in the media, or misconceptions that are portrayed.

We found out that there is a definite need for dialogue between the Department of Veterans Benefits and the Department of Medicine and Surgery. It seems there are approximately 18,000 Agent Orange claims that have been 24 percent of those. filed. Roughly have no in 13,000 cases, where disabilities disabilities. But

had are in / been diagnosed there / excess of 500 malignancies.

DR. SHEPARD: 15,000 or 1,500?

MR. MULLEN: 13,000. I think the 1,300
1300 which
you are referring to/are the claims that were allowed for
skin conditions. Am I interpreting this right? I believe
I am.

MR. WOODALL: In one--7,535 claims were denied, there were--

MR. MULLEN: Of malignancies, I think that's a, even though that may be a self-selected group that's I think an inordinately high amount of malignancies for such a small group of veterans. Additionally, and in earlier dialogue between DVB and DM&S, I believe, DM&S supplied DVB with the names of a thousand veterans, from the registry. It only correlated with one name in the claims that had been filed? So here you've got--

MR. WOODALL: One in ten.

MR. MULLEN: Oh, excuse me, one in ten. Okay,
one in ten. But still, there is
a great potential for increasing the numbers of the registry,
and the information in that registry. If you're talking
that only ten percent of those veterans are in that
registry, and vice versa. The one thing that
we really took umbrage at, is the fact that since those
veterans are not in the registry, they were rated without

the Agent Orange examination. Even though Agent Orange is claimed. And there are circulars out that state that the examination is to be conducted before the claim is raised.

DR. MOSES: If you're talking about the people who have already filed, a disability-these claims?

MR. MULLEN: For compensation. 18,000.

DR. MOSES: --Are they the ones who have been, or what did you say, they've been

MR. MULLEN: Some of those names are not incorporated in the register.

DR. MOSES: No, that I understand. I can see why that might be the case. You made another point about they Orange decided what their Agent/ exposure was, did you say?

MR. WOODALL: These claims were filed. They go back to 1978, '78 and '79 so far. They've been examined, but they were not subjected to the Agent Orange--

DR. MOSES: Oh, okay.

MR. MULLEN: And also, in V.A. law, if a veteran has an examination, or a hospitalization, or outpatient treatment, if he filed a claim within one year of that date, should he finally receive benefits for that disability,

he can go back to the date of that examination, as the date of the claim. The V.A. is not notifying these veterans after their Agent Orange examinations that if they don't file within one year, that the date they do file would be the

effective date of any benefits. So you've got 119,000 potential people, with the exception of the ten percent, that have not been notified that if they had filed within one year of that examination; their benefits would have been retroactive to the date of that examination.

DR. SHEPARD: I think there's a confusion here between, you hear me? I think there's some confusion between the registry and the C&P process. As far as I know, there is no, there is no formal link between the registry process, and the claims' filing process. Both are totally voluntary, on the part of the veteran. A veteran may or may not wish to be included in the registry, if he is filing a claim. And vice versa. Having the Agent Orange examination in no way obligates him to file a claim--

MR. MULLEN: No.

DR. SHEPARD: --or a claimant is in no way obligated to become part of the registry. You know,

I think, that ten percent of the overlap is not very surprising given the numbers.

On the issue of veterans being informed about the deadline on filing a claim. There again,

I don't necessarily see that it's incumbent upon the V.A. to tell people that there's a limited time in which they have to file a claim, if they go in for an Agent Grange examination. I don't know if that's the point you're trying to make, but that's the point I heard.

, 9

MR. WOODALL: That, that came up in our meeting. Two or three of the people here at the meeting believe that this amounted to a claim, informal claim, the Agent  $^{
m O}$  range examination. But, of course, it's not. For our purposes, we would have to have

a formal claim, before it becomes a claim.

MR. MULLEN: Okay, but, if you don't file that claim within one year of the examination, then you lose entitlement to a year of benefits. Should the claim be allowed? Under 3.157 if you have an examination, and you file a formal claim within one year of that examination, that examination is the effective date of your benefits.

DR. MOSES: Do you think people are having that exam because they think it's a claim?

MR MULLEN: No, but I think they ought to be made aware of their potential entitlement.

DR. FITZGERALD: Marion, I think some of them do think it's a claim.

DR. MOSES: That's what he suggested--

DR. FITZGERALD: And as a result of that, that has come up in this body before, and the Veterans Administration has subsequently been told to advise people that there is a distinction between Agent Orange exam, and filing of a claim.

DR. FITZGERALD: Our organization has gone ahead and advised them through our publications, that there is a distinction--you understand now?

DR. MOSES: Well, I understand now.

But you think they really are confused.

MR. MULLEN: Certainly, certainly.

DR. SHEPARD: We have attempted, through a number of initiatives, I believe, if I may jump in, to make that, very clear. And in the Agent Orange film, "A Search for Answers," you know, that goes back aways, the distinction is made. The encouragement is made, for those who watched the film, to--

I think I'm quoting it reasonably accurately, if you think you have a disability, file a claim. If you think you have a health problem possibly caused by Agent Orange come in and have an examination.

MR. MULLEN: I don't see where it would be that much trouble in the initial data base, to notify the man of his potential entitlement at that point.

DR. SHEPARD: Okay, that was just one example.

I think in the Agent Orange Review, which we now have at least three editions, I think the same point has been made. Maybe DVB / people would like to comment. Think as far as DM&S is concerned, we have tried, as a Department,

4 5

Ó

7

q

10

11

12

14

15

16

17

18

19

20

21

22

23

24

25

to encourage veterans, if they have any suspicion that they have a claim to go ahead and file the claim. And, if you're talking about a time limitation, then I'm not sure--Max do you want to comment on this?

 $$^{\mbox{\scriptsize MR}}$\cdot$$  WOODALL: Yes, one of the problems here, I'd like to explain--

DR. SHEPARD: Why don't you come up to the table and grab one of the microphones. Mr. Max Woodall, from the Department of Veterans Benefits.

### MR. WOODALL:

First of all, on the informal claim itself, generally we're talking about the claim filed by the 526 or the claim, treatment—if possible, I'm not sure the Agent Orange examination itself would constitute an informal claim.

Bob and I agreed I would have to research that. But I think for the persons, particularly if you have a diagnosis, in that case, they should file that claim as early as possible.

MR. MULLEN: And all we're asking is that the V.A. notify them at the time of that examination, that they should, period. That's all we're asking.

MR. WOODALL: I think that's what some of the people are upset about.

DR. MOSES: If they wish.

MR. MULLEN: If they wish.

 $$^{\mathrm{MR}}_{\mathrm{**}}.$$  WOODALL: There was a general opinion here, among three or four of the people, that that already costs them the claim.

DR. MOSES: Yeah, that--

MR. WOODALL: And they wondered why these, why the registry and the Agent Orange claim list didn't match. Okay.

DR. SHEPARD: I think then that being the case, as long as there's any continuing confusion then it is up to the agency to help clarify that. And I certainly will to with the commit myself/working/folks from DVB to do everything we can to clarify that in any future publications.

MR. MULLEN: Another point that we made and, according to Mr. Woodall, this has already been taken care of. There were obviously a number of claims that were denied without the benefit of the Agent Orange examination. Mr. Woodall has advised me that in future ratings, if the rating action does not contain a notation that the Agent Orange examination has been done, there will be no rating action done at that time. The rating will be deferred or continued pending the conduct of the examination before the man is rated as far as service connection, on a denial, or an allowance. Is that correct?

MR. WOODALL: Yes. According with a DM&S.--examination

DR. SHEPARD: Let me hasten to point out that there isn't any significant difference , in the majority of instances, between a C&P examination and a Agent Orange examination. Both are, presumably, fairly complete physical examinations. They may emphasize or focus on one area or another, as any appropriate physical examination does, depending on what the history suggests. So, I just don't want to leave the impression in the minds of people here, that somehow there is something very special about the Agent Grange examination which might not be, essentially identical to a C&P examination, or very similar to it.

MR. MULLEN: It was also suggested that a lot of people who are in the Agent Orange registry early on, were under lumped diagnoses—from what I understand. And there is a good deal of trouble separating that. Also there have been strides—

DR. SHEPARD: Would you like me to respond to that?

DR. MULLEN: If you'd like.

DR. SHEPARD: Certainly. That's true. And that's one of the reasons why we've done a major revision of the registry. We too were dissatisfied with the specificity of the medical information that was being reported. And we have now gone back and done a major Revision I

hope you are aware, major revisions have now been in place since March of this year, in which we are gathering much more precise information. For example, we are coding all diagnoses that are made during the process of examination, both by name and by ICD9 code number. We are noting specific kinds of consultations that are performed. We are gathering much more precise medical information. And will then soon be in a position to analyze that a little more precise fashion.

Orange examinations have been updated and refined, since the earlier examinations, we would suggest and recommend that in the next Agent Orange review, there be incorporated a letter, or article perhaps highlighting as you do in the one orange block that's on there, that they can come in for subsequent examinations as many times as they want, if the need arises. And encourage them to do so.

Because not only would this assure them that their health is being taken care of, but it would also give DM&S a chance to update the information that's in the registry, because as we've said, some of the earlier participants, those diagnostic codes under ICD-9 are not in there. We suggest and recommend that. And, I think that's most of the things that have come in our discussion. We would like to answer as quickly as

. **9** 

possible, on these recommendations.

DR. SHEPARD: Okay, recommendations, well, as I see it, you've made some recommendations for changes in policy. When you say an answer to them, you'd like to see policy changes, I presume.

MR. MULLEN: Exactly.

DR. SHEPARD: I can't commit for the administration.

MR. MULLEN: I understand. I'm not asking you for an immediate answer. I realize that red tape is always there. But we would like to have an answer as to whether proposes or not the committee policy changes in this area, as quickly as possible.

There's only one other thing and that was the cancellation of the Seven City Tour. We understand that there's going to be a film put out. And some of these recommendations we would like to see displayed in that film. So we request an opportunity, the service organizations, or other people who are interested, or may have an impact on the quality of that film, we would request before the final edit is made, and the final cut and reproduction is made, that we have an opportunity to screen that film. To make sure that everything that we feel is necessary to insure the veterans health, and his welfare is being given to him as portrayed in that film. That's about all I have.

θ

- 10

DR. SHEPARD: I'm sure Bob Putnam discussed the film and the whole outreach effort in some detail.

Let me just point out for the benefit of those who may not have been at that subcommittee meeting, that the film to which Fred has referred is primarily designed

for the edification of V.A. employees. It is not primarily designed as a film for showing to veterans. Now obviously, there's an overlap there. And I'm sure that the employees

pass the information on, and that is obviously one of the thrusts of the film.

we need to consider

So I think/whether we should change the film, or include some of the material that you've suggested in this film, or whether a subsequent film, or parallel film should be developed for purposes of showing to veterans and telling them, assuring them, advising them in terms of what they should do in relation to claims procedures. And the fact that Agent Orange examination does not, in and of itself, constitute a C&P--that kind of information might more appropriately be dealt with in a separate--through another medium. But we can discuss that.

MR. MULLEN: My problem with that is I was led to believe that this more than being a film for the purpose of edification, was more for the purpose of education of the V.A. employees. And I think part of that education should be

٥.

the knowledge and the onus to, as I said, notify these veterans that they should file a claim. If they don't file within a year, they dead. They can't get their benefits retroactive to the date of that examination. These are the types of things. I think the onus should be upon those people who are reviewing that film, to pass this information on.

I was Chairing an Information and Education subcommittee. These are information and education subjects, and the information and education is primarily not for the V.A., but for the veterans. And, that's why we're making these recommendations.

DR. SHEPARD: I understand, and entirely appropriate. Don't misunderstand me. I'm just saying whether they should be part of this film, or part of a different film, we'll have to discuss. Any questions for Mr. Mullen from members of the Committee? Any comments? We will take questions from the floor at the appropriate time, okay? I don't want to appear to be shutting you off, but we will do that.

PARTICIPANT: Clarification points?

DR. SHEPARD: We'll come to that. Thank you. Dr. Hodder, would you summarize the deliberations of the Subcommittee on Biostatistics and Epidemiology.

DR. HODDER: We had a crowded agenda today, and covered more or less the entire spectrum of studies,

В it more time.

11

1

2

3

4

5

6

7

9

- 10

12 13

14

15

16

17 18

19

20

21

22 23

24

25

including looking at a review and overview of published design literature. We looked at study/and formation of several studies in progress, and we evaluated those completed ones. Following them in the order they were presented: The first was Dr. Anderson who briefly told us more about the protocols he had presented earlier in the meeting. We've asked him to present this further at the next meeting where we can give

his Dr. Fortunati continued/ talk about/seveso exper-A couple of new points/ brought up.

Less than ten people out of the original 183 with chloracne persisted with the disease. And I believe, he said no new cases have been discovered since of new cases. January of 1979. So there's not a continuing formation/ Also only minor plastic surgery was needed in these cases. He also reiterated the spread of the dioxin was strongly related to the soil.

The other point of interest he mentioned that / persistence of the people coming back for follow-up has fallen off. This perhaps suggests continued good health although this needs further study.

Then Dr. Green presented an update of the solicited was a in-house research studies. There / considerable spectrum, from very basic science studies and metabolism to behavior studies / sleep studies. There were ten studies

۶,

Members of the sub-

committee asked for a list of all the studies so that at the next meeting they could specifically ask questions on points of interest.

Dr. Eisen, then, presented the V.A. identical and twins study. That study is similar to /reminiscent by the of the World War II studies /National Academy of Sciences. The objective stated was quite broad. The primary objective would be to look at the impact of of health; Vietnam service on all aspects / specifically however, toxicity herbicide / and post traumatic stress syndrome will be reviewed.

The key point, of to most committee members, of was the ability this type of design to overcome difficult many/ problems with controls in epidemiologic studies. He is going to look at both monozygotic and dizygotic twins and will look at all combinations of exposure; both those where neither twin went to Vietnam; and where one went and one did not:/ where both went to Vietnam internal controls / exposure.

Dr. Mulinare, then, discussed two studies. He

made some comments on the he had reviewed

Australian birth defects studies for several other groups.

The key points that he made were that this is

Ó

1)

really a Vietnam exposure study and is not specifically addressed to Agent Orange. The other point of importance he made is that this is basically a sound study although it has some limitations.

Conduct of the CDC

He then summarized the progress and the birth defects

study based on routine survelliance

for birth defects. Dr. Mulinare was encouraged by the

progress in the study. The goal had been to find 80 percent

of the parents, and interview 90

overall

percent of those. This would produce an/72 percent response.

it would be
And / particularly important, obviously to military status

service of the father in Vietnam. He expects preliminary results will be

forthcoming sometime in winter or early spring.

In the next presentation Dr. Hoar from NCI presented the studies of soft tissue sarcomas. Specifically the study is case control study, looking mainly at Kansas due to also a agricultural exposure. It's taking advantage of statewide cancer registry that Kansas has. And they're looking specifically at three groups. They're classifying the diseases as either soft tissue sarcoma, Hodgkins, or non-each Hodgkins lymphomas. They have three controls for patient, each matched by age and vital status.

Of particular interest to subcommittee was the amount of corroborative information both in the

effort being spent to recheck the biopsies, as well as/to go back and actually classify by the amount of herbicide used. Results are expected, perhaps in spring or summer.

1

2

3

4

5

Ó

7

8

¢

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Next two persentations were by Dr. Lavy and who
Dr. Hood/presented monographs, first on--herbicides. And

Dr. Lavy spent a fair amount

of time going over some of the exposure studies that
showed
were done. He / some pictures that were taken of field

studies. Dr. Hood also discussed his monograph.

The purpose of it's mention was that a single source of cacodylacic
acid. Both of them have fairly similar outlines from typical

acid. Both of them have fairly similar outlines from typical chemical properties, to the analyzing methods, production usage, the human exposure studies, etc.

The final presentation Dr. Kenneth Sell of the NIH Infectious Disease Institute who provided an overview of the immune system in exposure to TCDD. He said that in a review of the literature that animals of Dioxin qiven a sufficient quantity/will show a decreased T-cell activity. The corrollary to that though, is even under high doses, Mice showed a complete recovery at`a year's time. He 'used this background to look at Dr. Ward's study which supposedly showed decreased hemoglobin stimulation of the immune system. And decreased response specifically in people exposed. He felt that

i61

₿

. 9

1 }

you'd expect about five percent of control groups to be low. He did not show that. The control group was not typical of the general population, and he felt this was not a good comparison. Then he talked about studies that could be done / expected /to be difficult to show persistence of immunlogic defect in these animals. Using the model of the

immunosuppression of people on these drugs. Long-term, low dose immunosuppressants is very difficult to measure in effect.

Using that as an analog, it would be difficult to show it's effect on animals.

Again one year later, even after very heavy intense exposure, those effects were not shown.

DR. SHEPARD: Let me just add a couple of comments from Dr. Sell's discussion. I think the bottom line impression he had of what was presented as Dr. Ward's work, information he had was that the conclusions that Dr. Ward seemed to be drawing in his discussions were not substantiated by the data that were presented. And Dr. Sell, I think, had the

impression that conclusions were not only substantiated , but probably not valid. The reason I asked Dr. Sell to lead this discussion is that a great deal has been made of the Ward work. And I just wanted to put that into proper perspective, so that somebody with Dr. Sell's knowledge and in-depth

experience could give us the benefit of his evaluation and analysis of that work. Thank you very much Dr. Hodder. Are there any questions / from members of the Committee to Dr. Hodder or any comments by other people who attended either of the two sessions?

Okay, now I'd like to call on Dr. Flicker. Dr. Flicker is a very interesting person. She is both a physician and a physical chemist. And she also is one of our environmental physicians at our medical center in Kansas City. And she, in addition to having seen a large number of Vietnam veterans as part of the registry process, has also managed to / out enough time from a very busy schedule to play a very important role in

the cooperative studies we'll be doing with EPA--that is the analysis of adipose tissue for dioxin. And, Dr. Flicker was with Dr. Young and some of the chemists discussing the analytical protocol, and perhaps some other issues too. And, I'd just like Dr. Flicker to give us the benefit of those deliberations. Thank you.

DIOXINS/FURANS IN ADIPOSE TISSUE STUDY Thank you Dr. Shepard. Can you all DR. FLICKER:

hear me? I want to tell you what a thrill it is as a physician in the field to be here actually seeing all the field physicians receive in folks who are responsible for the wise words that we form. published/ And they're actually very helpful. I've been given lots of good advice from Dr. Shepard, Dr. Moses and I got to read about Dr. Mulinare on the TWA flight magazine on the way up here. So I really feel very privileged to be among all these celebrities. I'm going to try just to

highlight the major features of what was a very technical meeting.

I understand that you're all very familiar with the V.A., EPA coordinated program for the analysis of dioxin in human adipose tissue, and that you're also familiar with it's purposes; mainly to see if there is dioxin detectable in the world population; to devise standard analytic methods for getting this measured in a reprodicable way; to see if there are higher levels of the these dioxins and related chemicals, furans, in Vietnam veterans; and eventually to see if there's any correlation of these levels with health effects; a tough set of goals.

It's very interesting/in the meeting, data were presented from Canada and Sweden in unexposed populations that-indeed, as we suspected, there is a significant and measurable baseline level of TCDD and furans and higher chlorinated relatives. This means that

of ordinary people walking around who were not either in Vietnam or in industrial accidents. The sources of substances were these / not only the phenoxy herbicides; there are congeners, that is, higher chlorinated dioxins and furans, that are speculated by Dr. Rappe, for example,

not to have come from the phenoxy herbicides, but must have come from other sources such as flyash .

Also there were data presented suggesting a very important principle: that the toxicity of the dioxins are very much a function of other co-toxins to which the organism is exposed. In other words, there is work now that shows that teratogenicity of TCDD can be greatly magnified if the organism is co-exposed to furans; and the furans indeed dioxins. are naturally occuring in greater frequency than some of the

Also we are finding from the industrial accidents a large population of higher chlorinated species. And these principles, then, led the Committee and the group to a consensus. It looks as if it might be much more meaningful not just to analyze for dioxins, but also to try what is try called "pattern recognition:" to /to get relative concentrations of these chemicals, not just with respect to TCDD, the contaminant present in Agent Orange; but also to try to get levels of other dioxins and furans. Which dioxins and furans should be analyzed is a very important question. And that

depends on what we're looking for.

Pattern recognition would have several functions. First of all, given the political implications of this project, it would give us a handle on the origins of exposure. For example, Dave Stallings' group of the EPA has computerized his patterns, and now pretty much can tell you if a given pattern is from a fish source or an industrial accident. So, that can help us distinguish the source of exposure. We can run a stricter quality control program if we do pattern recognition. And basically, I think, those are the major features.

As part of developing our analytic method, it is also agreed that we should consider getting standards that are what is known as bioincurred. This is because when we do extractions of dioxins from living tissues, now that we know that there's a worldwide distribution of these chemicals; it's going to be difficult for us to assess just how much of the dioxin we're extracting is from an industrial accident or Vietnam exposure, for example, versus that which was already the baseline level in the tissue.

And Dr. Jim McKinney has suggested some ways in which we can feed an animal of choice—a cow, a pig—some radioactively labelled dioxin and dioxin relatives, and therefore test our extraction and other analytic

Ó

୍ ୨

the naturally techniques. Thus, we would differentiate the labelled from/
occurring dioxins, should they have occurred even from combustion sources.

١

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Those are some of the major points. It may interest you to know that so far we have collected nine kilograms of fat, thanks to the EPA. This fat is slated to become homogenized as a substrate on which to develop our analytic methods.

So, in summary, the major points were that dioxins and furans, as you all probably suspected, are everywhere. our analytic methods, then, must be such that we in addition to 2,3,7,8+TCDD can pick up these higher analogs of TCDD,/ /we'll probably need to use pattern recognition in our analysis. And that indeed, this is a feasible study. excellent work has been done by the statisticians in Dr. Joe Carrie's group, showing that it is feasible for the sample size that we're likely to have from the EPA archived adipose tissue samples. We're likely to have a statistically meaningful sample, and a statistically meaningful study, of course, subject to a large number of variables. These variables may indeed obligate us in the future to do a to control and assess., prospective study, should they become too difficult/ and too too many variables and criticisms. Dr. Moses obviously has thought of this! -- so that 's basically my summary of the highlights of the meeting.

DR. SHEPARD: Thank you very much Dr. Flicker.

Are there any questions or comments from members of the

Committee?

DR. MOSES: I have two. First of all, are there any plans, I realize the concern, as I say, of the Veterans Administration is the men between a certain age group, in a certain age group. But I feel that women can also contribute, many ways in this world.

DR. FLICKER: I heartily agree.

DR. MOSES: And I feel that somewhere down the line, conceptualizing this problem scientifically, that fat from women, fat tissue from women, I think, needs to be looked at. And I hope that maybe the V.A. could broaden their sights, somewhere along the line. I guess you have to get some early—

The second question related to the immune assays, do you know what the status is on that, or what. You say you mentioned Jim McKinney, and I know he's been very interested in that?

DR. FLICKER: The details of the status were not discussed in the meeting, to my recollection.

DR. MOSES: So, we've not gotten very far in that,
I guess?

DR. FLICKER: Unfortunately, you're right.

DR. MOSES: Thank you.

# EXECUTIVE COURT REPORTERS (301) 565-0064

Ó

DR. SHEPARD: Any other questions for Dr.

Flicker? Thank you again, good to have that report.

Now, I'd like to open up questions from the floor. Don

do you have some questions. Yes, you can come up, if you

please come up to the microphone and identify yourself

for purposes of the reporter, I'd appreciate it.

COMMENTS AND DISCUSSION

MR. KLEINGLASS: My name is Stephen Kleinglass, and I'm from the Medical Inspector's Office within the Department of Medicine and Surgery. I wanted to make one bit of clarification to some statements that Mr. Mullen made earlier on about the accreditation status of one of the medical centers. That accreditation was referring to SERP- accreditation, that we do internally to DM&S. It came up when we went to a medical center and we were reviewing the entire medical center for the quality of care both in the patient-related areas, the allied health areas, and the support services.

We specifically now, are looking at three areas in addition with a stronger eye, so to speak. One of those three is the Agent Orange program. We felt that at this particular medical center the Agent Orange program was not functioning as properly as it should. So we assigned a provisional accreditation status to that medical center. The medical center has one year from the date of the receipt of the report to correct the deficiencies in the

Agent Orange program, to remove that provisional status. I made the trip myself, and it's my indication that they will successfully complete that project and be able to remove the provisional status.

DR. SHEPARD: Thank you very much for pointing that out to us. I would also like to supplement that. The term accreditation means different things to different I suspect, and please correct me if I'm wrong, you were referring to VA accreditation, not JCAH accreditation. The term hospital accreditation and normal parlance suggests, Joint Commission on Hospital Accreditation, and not an internal examination. I didn't want anybody to get the impression that the JCAH would withdraw accreditation from a V.A. hospital based on what's wrong with the Agent Orange examination. But the point is well taken. I don't mean to downplay the importance of that review. And we certainly appreciate the efforts of our medical review teams in doing this. I think it's a very important adjunct to an ongoing quality control program. And we salute their efforts, appreciate their comments.

Any other questions from the floor. Gee, that's unusual. I think it's incumbent on me, perhaps, to make a comment on the matter of some recent press that has come out, regarding this large V.A. study. New York Times picked up on a news conference held at the American

١

2

3

5

6

7

8

, 9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

But just for the benefit of the people here in this room, and for the purposes of the record, it was nothing other than a description of some of the data that are contained in the Agent Orange registry, not an epidemiological study report.

I'd be happy to answer any questions in that regard if they occur to you. Any other questions, comments. If not, thank you very much for your indulgence, and I think it's been a good meeting. Appreciate your being here.

(Whereupon at 3:15 p.m. the meeting was adjourned.)

24

1

2

3

4

5

6

7

8

9

10

. 11

12

13

14

15

16

17

18

19

20

21

22

23



# Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

Eighteenth Meeting December 6, 1983

1	VETERANS ADMINISTRATION
2	* * *
3	ADVISORY COMMITTEE ON HEALTH-RELATED EFFECTS OF HERBICIDES
4	* * *
5	Room 119 810 Vermont Avenue, N.W.
6	Veterans Administration Central Office
7	Washington, D.C.
8	Tuesday, December 6, 1983
9	The meeting of the Advisory Committee was called
10	to order at 8:40 a.m.
11	ADVISORY COMMITTEE MEMBERS PRESENT:
12	BARCLAY SHEPARD, Chairman
13	GEORGE R. ANDERSON, Member
14	THOMAS A. FITZGERALD, Alternate for Irving B. Brick
15	GEORGE T. ESTRY, Member
16	HUGH WALKUP, Alternate for Jon R. Furst
17	FREDRICK MULLEN, Member
18	CAROLYN LINGEMAN, Member
19	CHARLES A. THOMPSON, Member
20	RICHARD A. HODDER, Member
21	DONALD BARNES, Member
22	MR. SEDGWICK, Substitute for Noel C. Woosley
23	
24	
25	

# $\underline{\mathtt{C}} \ \underline{\mathtt{O}} \ \underline{\mathtt{N}} \ \underline{\mathtt{T}} \ \underline{\mathtt{E}} \ \underline{\mathtt{N}} \ \underline{\mathtt{T}} \ \underline{\mathtt{S}}$

2		PAGE	МО
3	Opening Remarks Chairman Barclay Shepard, M.D.	1	
4	Charman Barcray Briogara, 1942		
5	Remarks by the Deputy Chief Medical Director John Gronvall, M.D.	2	
6	Literature Review/Analysis Update Carl O. Schulz, Ph.D.	9	
7	American Legion/Stellman Research Effort		
8	Mr. John F. Sommer, Jr.	20	
9	Agent Orange Registry Report Dr. Shepard	22	
10	Status of CDC Epidemiology Study		
11	Dr. Shepard	23	
12	Women Veterans Colonel Lorraine Rossi, U.S.A, Ret.	25	
13	CDC Birth Defects Study Dr. Shepard	30	
14			
15	Reports of Subcommittees Mr. Fredrick Mullen, Sr.	34	
16	Pichard A. Hodder, M.D., M.P.H.	48	
17	Agent Orange: A Perspective on Responsibility		
18	John M. Levinson, M.D.	58	
19	Comments and Discussion	70	
20			
21			
22			
23			
24			
2.4	II		

# EXECUTIVE COURT REPORTERS (301) 565-0064

## PROCEEDINGS

CHAIRMAN SHEPARD: I would like to call the meeting to order and welcome you to the 18th quarterly meeting of the VA's Advisory Committee on Health—Related Effects of Herbicides. It is hard to believe that we have gone through 18 of these meetings now over the last several years. I think it is, if nothing else, a tribute to the fortitude of those of you who have been with the program, both directly and indirectly.

I think it is safe to say we have managed to keep our heads reasonably well above water, I think over the previous months and years. It is always a pleasure for me to chair these meetings, because I do think they do provide an opportunity for the VA, as an agency, to get input from a number of different sources, and also it is probably the only meeting of its type in the Federal Government in which we share information in a public forum.

So, once again, I welcome you all to this meeting.

A few housekeeping notes: This will be the third meeting in which we have had meetings of two subcommittees.

Unlike the last two meetings, the Subcommittee on Biostatistics and Epidemiology will remain in this room, and the Subcommittee on Information and Education will move to Room 139, which is on this floor on the other side of the lobby. So please take note of that at the

EXECUTIVE COURT REPORTERS
(301) 565-0064

appropriate time, when we break up for our subcommittee meetings.

As has been true in the past, this is an open meeting. We would hope that all of you would register as you come in. If you haven't done so, please do so, so we can keep track and make note of your presence here. It is very important to us.

We are very pleased this morning to have with us Dr. John Gronvall, who is our newly appointed Deputy Chief Medical Director. Dr. Gronvall comes to the VA after a distinguished career in academic medicine and in the field of pathology. Dr. Gronvall is a board-certified pathologist,

and, most recently, was the Dean of the  $^{\rm Medical}$  School at the University of Michigan at Ann Arbor.

Dr. Gronvall first came as the VA Deputy Assistant Chief Medical Director for Academic Affairs, and then on September 18th of this year, was appointed to the position of Deputy Chief Medical Director to assume the position vacated by Dr. Jacoby, who has retired from the VA.

We are very pleased to have Dr. Gronvall with us to address the committee and the audience.

Dr. Gronvall.

ģ

## REMARKS BY THE DEPUTY CHIEF MEDICAL DIRECTOR

IR.GRONVALL: Barclay, I thank you very much for the kind introduction. I appreciate very much the work of this committee.

I should tell you that I view my function here as making several minutes of opening comments so that the audience and the committee can kind of quiet down and forget about the things that were going on a few minutes ago, and then really get down to work.

I primarily want to welcome both the committee and the audience to these deliberations in addition to thanking the committee. When I moved into the Deputy Chief Medical Director's office, I very quickly discovered that the concerns about the effects of dioxin on humans had a quite preemptory character unlike much of the other work that goes on in the Deputy's office.

So within a few days, it seems to me, I became completely immersed in Agent Orange, symbolically at least, if not actually. When Barclay just introduced me as the newly appointed Deputy Chief Medical Director, I was thinking back about all of the energy and effort that has gone into the Agent Orange issue in the past couple of months, and it has been it felt like/a very long time that I have been dealing with Agent Orange. I have been very impressed by the work

of this committee and the research community, not only in the United States, but throughout the world, in regard to the number of studies now underway dealing with the effect of herbicides on human health.

I have been impressed with Barclay and his staff and the people that I have dealt with here, who I am very convinced are honestly seeking the best possible scientific information on this question, whatever that may be.

I know that from the outside many have been concerned that we had a predetermined outcome that we were working toward, and I think that is always a concern when you are dealing with a large governmental or bureaucratic organization.

Again, I would repeat, though, it has been very pleasing to me to gain the sense from inside the workings of the VA that to the best of my knowledge, there is no predetermined conclusion that we hope will come out of these scientific investigations.

Whatever the data are, we hope that once they are tested and accepted by the scientific community, those can then provide a sound basis for political and other social judgments about what to do about the problem. And our role certainly, and your role in working with us is to look for that underpinning of valid scientific information and judgment that has been developed to the point of consensus in the

scientific community.

It is extremely critical, I think, for us to have advisory groups like this one who can bring a broadened perspective to us, review what we are doing, test what we are doing, and be certain that we are making progress toward that goal.

alen

I have/been impressed with the Agent Orange Working
Group. It has had now a change in chairmanship. Dr. Edward
Brandt , who is the Assistant Secretary for Health in the
Department of Health and Human Services, has just been
appointed to chair the committee.

effective health administrator on the federal scene. I think he is interested in, and committed to, the programs on Agent Orange, and will be a good chairman of that key committee.

The committee meets on the 15th of December. That will be the first meeting since Dr.Brandt assumed the chairmanship. So I think that we are going to have a strong coordinating point in the Federal Government to bring together, not only the VA, but all of the federal agencies that are working on herbicides, Agent Orange, and dioxin exposure.

In passing, I want to say a public word of thanks
Dr.
to/Al Young, who has been part of Barclay's office, on
detail here from the Air Force. I expect probably most

people in the audience know or have heard that Al is moving to the White House on the 1st of January. He will be in the Office of Science and Technology Policy,

George Keyworth's office, the science adviser to the President.

will miss his participation here in Agent Orange issues/we move hope to capitalize onhis/in the sense of having a knowledge-able and informed person on the Agent Orange question now being part of the White House staff. Hopefully, that added focus at the presidential level will hasten the progress that the country is making in coming to scientific conclusions about the effect of dioxin on humans.

Once again, welcome. It is a pleasure to have you here, and in spite of the preemptory character of some of the Agent Orange questions that we have been dealing with, it has been a pleasure for me to get questions, deeply immersed in these for a working with Barclay and his staff, the advisory groups dealing with veteran service organizations, the rest of the scientific community, and Agent Orange Working Group.

I think we now see our way clear to a series of studies that will produce the information needed, so that the country can have a sound scientific basis on which

Q

to make political and social judgments.

So, again, I wish you well in this meeting, and thank you.

CHAIRMAN SHEPARD: We appreciate your coming.

Just a couple of other notes. We have had some change in the makeup of the committee, membership of the committee.

George Estry, who is an appeals consultant at the VFW and an alternate member of the committee since March of 1983, has now been appointed as a full-fledged member of the committee, and we welcome him to the committee as a full-fledged member.

Dr. Adrian Gross, who served faithfully for many years, representing the Environmental Protection Agency, has resigned and his position has been filled by Dr. Donald Barnes, who is a senior science adviser in EPA's Office of the Assistant Administrator for Pesticides and Toxic Substances.

Don Barnes has had a long-standing relationship to the whole Agent Orange issue in that, among other things, he has been EPA's representative On the Agent Orange Working Group, and has been working very closely with us on a number of projects. We certainly welcome him to the committee.

I am sorry that he is not here yet. I suspect that the weather may have delayed some members. I know there

are some in-town members who I expect will be along shortly.

Unfortunately, we got a call this morning from

Dr. David Erickson that the weather in Atlanta has

very
been/severe -- tornadoes, very heavy thunderstorms.

A pparently flights have been cancelled. So he will not be with us today, which is a loss because we were hoping to get an update on the status of the birth defect study, as well as the progress of the plans for the large epidemiological study of which he will be the principal investigator.

He expressed his apologies to the committee. He will, however, be here for the Agent Orange Working Group on the 15th, so we will be able to avail ourselves of his counsel at that time.

Dr. Joseph Mulinare, who is now the principal investigator for the birth defects study, has also had apparently a health problem in the family, and I do not think he will be with us this morning. We have not heard for certain, but information suggests that he will have to return quickly to Atlanta.

I think we will go on with our agenda and ask

Dr. Carl Schulz to talk a little bit about the status of the

literature review/literature analysis update. Carl Schulz

has been the program manager for the contract with Clement

Associates, and we have been working very closely with him,

and we are pleased to have Carl with us this morning.

Ó

### LITERATURE REVIEW/ANALYSIS UPDATE

DR. SCHULZ: Thank you.

ó

R

Clement Associates was awarded a contract by the VA last April to update the literature review on the health effects of phenoxy herbicides and their impurities. A previous literature review, annotated bibliography, and analysis of the literature was performed by JRB Associates, and published by the VA in October of 1981.

Our job was to review the literature published since that time, and create an updated, annotated bibliography and a critical analysis.

We have completed the literature search and acquisition, and a draft  $^{\mathrm{of}}$  the critical analysis, and delivered that to Dr.Shepard here at VA for VA review.

We hope to have their comments back by the end of this month. We hope that we can incorporate any necessary changes that might be required as a result of their comments in January, and hope that we have a camera-ready copy late in January sometime.

What I would like to do in the brief time I have this morning is to highlight what the review has accomplished and what we have found. I have prepared a handout, which the members at the table have. There are 25 extra copies back there, which are not enough to go around one to one, but if you can figure an equitable way of distributing them,

members of the audience are welcome to have copies.

The scope of the review is such that we surveyed all literature available since the time of the JRB report, which was roughly mid-1981. We limited the review to phenoxy herbicide active ingredients and commercial formula—

That
tions. /is 2,4-D, 2,4,5-T, and in some cases, MCPA, the impurities, mostly polychlorinated dibenzo-dioxins, and two other herbicide active ingredients, cacodylic acid and picloram.

We limited the review to health effects, and in this sense, it is a little more limited than the JRB review, because we did not discuss environmental distribution, analytical chemistry, and some of those topics.

We tried to obtain all information, published and unpublished, that is available to the public. We made as good an effort as we could to identify material that was unpublished, not yet published, and published in some rather unconventional resources.

I think we did a pretty good job of that. One of the problems in this area is it is such an active field of current research that there are many studies now, that we know of, that are complete, but we were unable to obtain the results of those studies because they have not been published, or they are being kept confidential for one reason or another.

So one of the legacies that we have is that our

report will be outdated the day it is published.

The next page of the handout tells the number of documents we found. We identified 452 total documents as relevant to this issue. We were unable to locate copies of three of these. I hope that by the end of January we will be able to. Thirty-one of these documents were related to the minor herbicides: cacodylic acid and picloram; leaving us 418 documents dealing with phenoxy herbicides and/or their impurities.

This, to me, is remarkable that in a two-year have the period, 418 documents/become available, showing/interest in this field. 161 of these documents are what I call secondary resources. No original primary research data are included in them. They are reviews, news reports, comments, and risk assessments, and so forth; leaving us 257 primary literature resources.

Eighty-four of these 257 are studies of exposed human populations, and 173 are studies in experimental animals.

The next page breaks down the human studies, the 84 human studies. Of the 84 total documents representing studies of human populations, 43 are studies of populations of people who were exposed to phenoxy herbicides or dioxins — as I will use the shorthand here, dioxins — through occupational exposure. Sixteen more studies are studies of the

Seveso population exposed to -- presumably exposed to dioxins as a result of a reactor explosion in 1976.

In those two categories, there is an awful lot of duplication. The same data are published in two or more different documents, so it looks like there is more literature, more information on these populations than there really is.

Twelve of the documents were other environmental exposures where people were exposed through the use -- presumably exposed through the use of phenoxy herbicides in the areas where they live.

Seven of the studies are Vietnam veteran studies, many of these dealing with the Agent Orange registry. Six are isolated case reports of a miscellaneous nature. About a third of the occupational studies are involved with absorption, distribution, and metabolism of phenoxy herbicides and their impurities, and contain no direct health effects data.

The experimental animal studies are broken down on the next page. Of the 173 studies, only 4 of these primarily involved determining cancer as an end point.

Twenty-four deal with reproductive toxicity including teratogenesis, 26 with genotoxicity, 13 with neurotoxicity, 10 with immunotoxicity, 21 with absorption, metabolism, distribution and excretion, 19 with enzyme induction, and 56 deal with other toxic effects, mostly

mechanism of action and miscellaneous topics.

ó

Ŷ

I would like to point out here that of these animal studies, I would estimate that at least three-quarters deal with the toxicity of polychlorinated dibenzo-furans, mostly TCDD, 2,3,7,8/ tetrachlorodibenzo-dioxin , and very few deal 2,4,5-T, 2,4-D, with / or commercial formulations thereof.

I would just briefly like to mention some of the limitations of the literature we looked at. Despite the large volume of literature, my opinion is that this body of literature is not of very good quality relative to bodies of literature about other toxic substances.

Many of the human studies are very limited in what you can do to interpret them, and in almost every case, the exposure, what the people were exposed to that are studied, is uncharacterized. This very clear in some cases when you get to situations where people sprayed undefined herbicides are unknown.

and the active ingredients and impurities /

There is a lack of adequate control groups in most cases. In the epidemiology studies, the study populations are compared to national populations, and so forth, and the use or exposure to herbicides and impurities in the control group is not determined and characterized.

Finally, in terms of the studies dealing with cancer as an end point, epidemiologic studies, just as a matter of the way things are, there hasn't been sufficient

time elapsed between exposure and time of the studies to allow for sufficient latent period for most cancers to develop. This is a more severe limitation on the negative studies than on those that suggest positive outcomes.

The animal studies are likewise limited. Again, the test substance in most of these studies is not adequately 2,4,5-T or 2,4-D characterized. If they test / in most cases, the amount and distribution of dioxin impurities is not given.

not been tested. The relative toxicity of the various polychlorinated dibenzo-dioxin isomers have not been well studies. In many of the animal studies, the routes of exposure, intraperitoneal injection, or oral exposure are not relevant to the routes that we are interested in from the human exposure studies.

That completes my summarization.

CHAIRMAN SHEPARD: Thank you very much, Carl.

That was a very nice detailing of your efforts. We have just received the draft document that Carl referred to, and we will be reviewing it, and hope to get it into publishable shape as quickly as possible.

I just want to hasten to assure everybody that our role, VA's role, in reviewing this will not be in any way to influence the excellent work that Carl has done in terms of the scientific merit of the literature, or in any way the

conclusions that have been drawn as a result of his group's scientific review. It will simply be to review the work from the point of view of whether or not it complies with the terms of the contract

If we become aware or if we are aware of any citations that were not included, that we think should have been included, then we will have the opportunity to include them.

But I doubt that is the case, because Carl has been working very closely with us, and it is not as though he went off and did this in a vacuum. He has been touching down with us frequently to assure the completeness. Since Al Young, among others, has had a very complete library, has been following the whole issue, probably as closely as anybody in the world, it seemed appropriate that Al Young and Carl work closely together to make sure that no omissions were made.

You will all remember the embarrassment of the VA when we were not as aware of the Swedish studies as we should have been when they were published. We certainly don't want to go through that experience again.

The other point I would like to make is that in regard to some of the limitations that Carl has so appropriately pointed out, I think he makes a strong point for the fact that a lot more research is still needed in some of

3

5

6

7

8

9 10

11

12

13

14 15

16

17

18

19 20

21

22

23

24

25

the basic science areas. There is still an awful lot about the toxicology of TCDD that we know nothing about, and that remains a mystery.

at the Rockefeller University symposium I was held the early part of last month -- excuse me -- the early part of October, and there were some very reputable scientists from all over the country in attendance there. They share the concern about the baffling mystery of the toxicology, why it behaves so very differently in different animal species. It is almost a unique substance.

Are there any questions from members of the committee for Carl? Yes, Dr. Lingeman?

DR. LINGEMAN: Did you attempt to evaluate each one of these reports separately? You made some statements that overall quality of many of them was poor, but

will your report include your evaluation of the individual report?

DR. SCHULZ: Yes. We have critically evaluated every individual primary literature source. We might have missed one or two, but we critically evaluated each one, and the report is actually over 400 pages long. So it evaluates the studies individually, and then tries to integrate all the available information, including the pre-'81 information as much as possible to arrive at our best estimates of the state of knowledge in these areas at the present time.

DR. LINGEMAN: Having not read the contract, I would like to know how many people were involved in this and what are their scientific backgrounds?

DR. SCHULZ: A very good question. There were four of us at Clement Associates, who are principal authors. I was the project director. I am a board-certified toxicologist. The other three authors are a Ph.D. toxicologist, a biostatistician, and a Bachelor's level biologist environmental scientist.

Those four people contributed all the written draft material. In addition to that, we had senior level advisory review. The three reviewers were Dr. Kenneth Chase, who is an M.D. occupational physician, Dr. Marvin Schneiderman, who is a biostatistician epidemiologist, and Ian Nisbet, who is a toxicologist, environmental scientist.

So, basically, those were the people involved in the production of this document.

CHAIRMAN SHEPARD: Any other questions of Dr. Schulz? Yes, Hugh?

MR. WALKUP: Dr. Schulz, has your review included articles from Vietnam and eastern European countries?

DR. SCHULZ: As much as possible. We have included several studies of occupationally exposed populations in the eastern European countries, Czechoslovakia, and so

*7* 

forth. In the Vietnam area, the major information was information that was provided at a symposium in Ho Chi Minh City, I believe early this year, January of this year.

Unfortunately, none of that information is published in a conventional scientific report form, but several different people who attended that conference summarized the data that were presented there, and we have reviewed that and included that information in our overall evaluation of the literature.

MR. WALKUP: At one point /your discussion you talked about some unincluded studies which were not reviewed because they were confidential for one reason or another.

What were the reasons for those alleged confidentials?

DR. SCHULZ: The one big area is not data on the major herbicides, but much of the health effects data on picloram is the company trade secret of Dow Chemical Company and in the files at the U.S. EPA, involved in the registration proceedings going on there, and we could only have access to summaries of that data, not the original studies.

There were other instances where we knew about studies that were going on and were completed, and we wrote to the authors and asked for preprints because they have not yet shown up in the literature.

In some of these cases we did get preprints, but in other cases they chose not to, which is their prerogative.

MR. WALKUP: So they were only in the cases of Picloram and professional confidentiality?

DR. SCHULZ: Right.

CHAIRMAN SHEPARD: Yes, Dr. FitzGerald?

DR. FITZGERALD: Doctor, you have indicated some of the studies that are not appropriate in your estimation. Will your report show any that you will advocate as being outstanding or worthy of particular note of this committee?

DR. SCHULZ: Yes, I think that we have tried to point out that the report is not negative in balance, that we have indicated which are the more reliable and good studies, but that I think depends on how the reader reads it, because the report is generally critical from a scientific — it is scientifically critical.

CHAIRMAN SHEPARD: Are there any other questions of Dr. Schulz?

I might just add that we are very privileged to have Dr. Levinson with us today, who is on the agenda for later on in the program. Dr. Levinson, I believe -- correct me if I am wrong -- attended the Ho Chi Minh City symposium and has had many trips to Vietnam, so I think it will be very interesting to hear his comments about that symposium and other issues related to that whole effort.

We will be very much looking forward to Dr. Levinson's remarks later on in the program.

Thank you very much, Carl. I am now in the process of considering how we want to conduct this review. I certainly would want to involve some of the members of this committee in that review process. As soon as we get some of the material duplicated, we will share it with members of the committee so they can look at it.

Thank you.

Ó

Next, I would like to call on Mr. John Sommer of the American Legion to give us an update on the status of the Stellman research effort. I use that term perhaps for the lack of a better one. If there is an official title for that, John, would you share that with us, please.

AMERICAN LEGION/STELLMAN RESEARCH EFFORT MR. SOMMER: Thank you, Dr. Shepard.

My name is John Sommer. I am Deputy Director of the National Veterans Affairs and Rehabilitation Commission of the American Legion, and I have been asked to briefly comment on the Columbia University and American Legion Study of Vietnam Era Veterans. This will be very brief for two reasons.

Number one, we have a pretest currently underway, and we are aware that there are going to be some changes made before the full test begins; and, secondly, because the protocol and the questionnaire that we are using will be Advisory Board for the study. considered this Friday by the Scientific / Therefore, until they have considered and approved both of these

instruments, I am not at liberty to discuss them.

The study is based upon a model that has successfully been used by the American Cancer Society in their Cancer Prevention Study II. It consists of looking at 15,000 members of the American Legion that served during the Vietnam era; 7,500 that served in Vietnam, and 7,500 that served during the era but elsewhere during that period.

way in South Dakota. We have thus far experienced a very good participation rate. The study will be comparing the overall health of the group of individuals that served in Vietnam with the group that served elsewhere, and the health also of their children. We will / be looking at specific issues, such as post-traumatic stress disorder, and some of the questions surrounding Agent Orange.

A very interesting part of the study will be to get the perception of the entire group of the benefits and services provided by the Veterans Administration, both through the Department of Veterans Benefits and the Department of Medicine and Surgery.

The full study will convene in February, and we expect to have a final report available the end of October or the beginning of Novemer of 1984.

That concludes my comments.

CHAIRMAN SHEPARD: Thank you very much, John.

Are there any questions for Mr. Sommer of the members of the committee?

(No response.)

CHAIRMAN SHEPARD: Thank you very much, John. I look forward to the study, and hope it progresses well.

MR. SOMMER: Thank you very much.

CHAIRMAN SHEPARD: Next, I would like to give you a very brief update on the status of the Agent Orange Registry, about which I am sure you have heard a great deal in recent weeks.

American Chemical Society's journal, the environmental and science's publication that they put out, an article that was authored by some of us here in the VA. That alluded to some information arising from various studies and some preliminary descriptions of the status of the registry.

AGENT ORANGE REGISTRY REPORT

Let me just quickly state that as of September 30, we have conducted 125,649 initial examinations in the Agency Orange Registry process. In the past fiscal year, we have done 28,000 initial examinations and almost 8,000 followup examinations.

So you can see that the Agent Orange Registry continues. It has slowed down a little bit from its high point of 3,000 examinations a month. We are down to just under 2,000 a month, that is, across the country. But, still, that

is a significant number, and we are still encouraging veterans to participate in that program.

Just to remind you, we did do a major revision to the data input process in that we revised the code sheet to make it much more specific in terms of medical information derived from the physical examinations, the laboratory tests, and so forth. So we have in effect since May of this year, hopefully more precise data which will enable us to more quickly get more precise information retrieved.

Again, I want to point out that this is not an epidemiological study. It is simply a review, a health screening process for any veterans who desire to avail themselves of this service.

## STATUS OF CDC EPIDEMIOLOGY STUDY

As I mentioned earlier, Dr. David Erickson, who was going to be with us today to talk about two things, talk about the CDC study and then focus a little bit on the plans for doing a study of female Vietnam veterans, unfortunately is not going to be with us today because of weather conditions in Atlanta.

He did ask me, however, to state that the plans for the study are progressing well. The protocol has been submitted for review by a number of groups, including the Agent Orange Working Group Science Panel. The review comments have been collected and submitted back to the investigators. So that process is moving along well. Mr.

2

3

4

5

7

8

9

10

11

12

13

14

1.5

16

17

18

19

20

21

22

23

24

25

Richard Christian, who heads up the Army Agent Orange Task Force, is charged with the responsibility of identifying cohorts for that study, and that process has begun.

It is my understanding that because of the relative ease of selecting cohorts for the Vietnam experience study as opposed to the Agent Orange study, which is a more complicated, complex process, probably will result in the Vietnam experience study getting underway sooner than the Agent Orange study, but I am not certain of that. I just mention that as a possibility. And in the event that you should hear anything to that effect, I want to very quickly emphasize that it is not because of any lack of interest or desire on the part of CDC to get on with the Agent Orange study.

It is simply that the identification of the cohorts for the Vietnam experience study will be somewhat less complex and therefore probably more quickly accomplished, and that portion of the study may in fact precede the initiation of the other study.

I suspect, however, that the two studies will be ruh pretty much in parallel.

Because of the intense interest in the whole issue of female Vietnam veterans, has proposed a study to address those concerns. I want to assure you that that interest is shared by the VA, and to that point, I would like to introduce to you Colonel Rossi, Colonel

Lorraine Rossi, who is Chairperson of the Veterans

Administration Advisory Committee on Women Veterans. I hope name of the committee.

I have given the right/We are most pleased to have Colonel Rossi with us this morning.

Good morning.
WOMEN VETERANS

COLONEL ROSSI: Good morning. Thank you very much, Dr. Shepard. I am sorry that Dr. Erickson couldn't join us this morning. I was introduced as the Chairperson of the VA Advisory Committee on Women Veterans. That is a newly-formed committee appointed this summer by the VA Administrator, recently approved as a Congressional Committee.

Our first meeting was held in September. Eighteen members of that committee, 16 women, 2 men. Three of the members of the committee are Army nurses, former Army nurses also who served in Vietnam. I am/a Vietnam veteran. So we have four women on the committee who are Vietnam veterans.

At: our first meeting, Dr. Shepard and Colonel

Young gave us excellent briefings on Agent Orange and

studies in effect. The women on the committee expressed

very little consideration of the women who served in Vietnam, and the concern on the part of the committee that because of the small numbers, as so very often happens, women were excluded from the studies.

Not intentional on the part of anyone to exclude the women, but because it was estimated that only 2 percent of the population of veterans were women, then that almost automatically excluded them from any sample that was taken.

So special efforts have to be made. The VA has recognized that, fortunately. CDC has recognized that now. We need to continue emphasizing that it must take special effort and special consideration to include women in the studies, and of course, one of our main concerns would be

for the younger women who served in Vietnam

for any affects on their reproductive system.

So, again, I thank you today for allowing me to this speak, even in Dr. Erickson's absence, to let committee know about our committee.

We have a broad view of women veterans and some of the problems and some of the issues facing the VA; one of the issues that we have identified is the issue of women being included in Agent Orange studies.

Thank you very much.

CHAIRMAN SHEPARD. Thank you very much. Are there any questions of Colonel Rossi? Yes, Dr. Lingeman?

DR. LINGEMAN: I would like to know how many women veterans served in Vietnam, and what proportion were nurses as opposed to other occupations.

#### COLONEL ROSSI:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

We have no exact answer to that question,

The closest

estimate is about 7,000.

The

majority would be nurses, most of them Army nurses who served in many areas throughout the country.

Some, a smaller portion were enlisted women, mostly
Army enlisted women, but you also had some Marines and
Air Force.

DR. LINGEMAN: What age groups? Are most of these nurses young women?

COLONEL ROSSI: Most of them were young women,
lieutenants and captains, and I would say under
35 years of age.

20

21

22

23

24

25

Some of the supervisory personnel in the senior grades would be older.

MR. WALKUP: Is there any way for our committee to open formal diplomatic relations with your committee, so we know what you are doing, and to find out what is going on?

COLONEL ROSSI: We can work that out very easily.

CHAIRMAN SHEPARD: Yes, that was one of the reasons that we invited Colonel Rossi and other members of the

committee to be here. We would like very much to do that, and as Colonel Rossi indicated, Al Young and I briefed their committee on our efforts and the whole area of Agent Orange, so I think there is a good dialogue already started.

For those of you who may not be aware, Dick
Christian, whose name I mentioned earlier, who heads up the
Army Agent Orange Task Force, is also building a registry of
female veterans. That may not be entirely accurate. He is
trying to identify as many female Vietnam veterans as
possible from a variety of sources in order to have a group
of women for the purposes of the CDC study, and, I think, to
get a better handle on the evaluation of the character of
that universe, because there is relatively little that we
know, as Colonel Rossi has indicated, about the numbers.

Although we have a good sense that most of them were Army nurses, we are not sure of some of the finer details of the makeup of that group. So we very much look forward to Dick Christian's efforts in this regard, so we can get more definitive information.

#### Yes. Peter Kahn?

DR. KAHN: Colonel Rossi, the Red Cross and the churches, and a number of other private agencies had substantial numbers of women out doing health work and refuge relief, literacy work, and what have you, all through Vietnam. Many of them were there for more than a year. I am

24

25

sure it wouldn't be too difficult to track a lot of them down through their private agencies.

COLONEL ROSSI: Thank you.

DR. KAHN: That would add to your numbers.

CHAIRMAN SHEPARD: Dr. FitzGerald?

DR. FITZGERALD: Are you identifying, at this point, conditions unique to women? Are you at the point where you can share that with us?

COLONEL ROSSI: Are you talking about in this particular area?

DR. FITZGERALD: Yes.

COLONEL ROSSI: No. Our committee is an advisory committee, where we can come to the Veterans Administration or to, say, this committee, and ask that you include women in your studies. We have not identified any specific areas of concern other than that we know that there are some women who have appeared and asked for physicals, because they are concerned about the effects of having served in Vietnam and the possible effects of that.

Does that answer your question?

DR. FITZGERALD: What I would be interested in would be that indeed when the time is appropriate, that you

would draw to our attention any unique conditions that you feel have been overlooked, so that we can follow through on it.

COLONEL ROSSI: Fine, yes, we will do that.

MR. WALKUP: I think another aspect of that, Col. Rossi, too, is that we have recently broken into two subcommittees, as you heard, and one is looking into science, which is often what you hear about our group, but we are also trying to take a look at -- it is called education and information -- but the services that people receive around the issues of Agent Orange and related --

COLONEL ROSSI: Related.

MR. WALKUP: I would imagine that is something that your committee is looking into and something that I think is important for us to coordinate, or to let each other know what sets of problems or --

-- or virtues you are coming up with.

COLONEL ROSSI: Yes, and one thing that we have recommended, that there be an outreach to the women veterans to let them know that there is concern and that someone is looking out for them.

# Thank you. CDC BIRTH DEFECTS STUDY

CHAIRMAN SHEPARD: Thank you very much, Colonel Rossi. We appreciate your being here. I would also like to

announce that Dr. Mulinare, who will not be with us today, on was to have reported at the Science Subcommittee/the status of the birth defects' study being conducted in Atlanta.

ı

ó

Let me briefly summarize the status of that study since he will not be here to give you this information. Dr. Erickson shared this information with me on the telephone this morning, so it is fresh. All the data has been collected. The interviews have been completed.

We are happy to report that CDC was able to contact at least one member of the parent pair in 70 percent of the cases which they were hoping to reach. That is considered to be a very good average of a study of this type.

So they are pleased that they got that level of participation. As probably predictable, there is a higher rate of locating and questioning the mothers than the fathers. There are a variety of reasons for this, some of which are obvious.

The father of the child may not currently be the husband of the mother. That poses a problem. Some fathers chose not to participate. Probably the most prevalent reason for that disparity is that the mothers were the ones who were registered at the time of the birth of the child with the defect and also of the controls.

In the normal course of registering children, making

out birth certificates and hospital records, there is much less information gathered on the father, for some reason, than there is on the mother. So, in most instances, the information available on the mother was recorded in the hospital records, less information was available on the father.

not routinely recorded on the father in the hospital records, and the mother does not always have a Social Security number. We have gotten a lot of cooperation -- they have, CDC has, been very fortunate in a very high level of cooperation through the Internal Revenue Service and the Social Security system in tracking down the location of the parents of the children, both the children with the defects and the controls.

standing job in locating them and conducting these interviews. The data, as I say, has been collected, and now is in the process of being analyzed. I asked Dave this morning when he hoped that the report would be finalized and available for distribution. He said early in the spring of '84. So that is the target date, and we will be anxiously looking forward to that report when it comes out, because I think it will answer one of the very emotional concerns of Vietnam veterans, that is, the risk of their having children

ו	with birth defects.
2	Any other comments from the committee? If not,
3	we will now break into our separate groups. The
4	Biostatistics/Epidemiology Group will stay here. The
5	Information/Education Committee will move down
6	the hall to Room 139.
7	I will turn over the chairmanship of this group
8	to Dr. Hodder.
9	(Advisory Committee recessed for subcommittee
10	meetings at 9:35 a.m.)
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

(2:10 p.m.)

CHAIRMAN SHEPARD: It looks like our two committees finished up at approximately the same time, which attests to the skill of our able executive secretary, Don Rosenblum who puts agendas together very well. I think.

I would like to call now on Fred Mullen to give us a brief summary of the activities of his subcommittee, and then we can open up for discussion.

Fred?

REPORTS OF SUBCOMMITTEES

MR. MULLEN: Thank you very much.

First of all, I would like to discuss the literature review update. We were led to believe that some of the information that was used, some of the articles that were used were fairly accurate, but some of the information had to be, not pried loose from Dow Chemical, but they were cooperative if you can use a word that strong. In other words, there was other information out there, but because of certain skewed rules and regulations, could not be obtained and which may well affect the validity of some of the literature that is going to be used in the literature review update.

We also found that there was concern over the reference to gender in some of the literature, and we wanted future literature to not take into consideration sex

in deference to the women veterans. They feel that some of the information is almost all geared toward the male. It is male-oriented, when, in fact, there are women out there who would fall into that same category, especially where they refer in some of the birth defects studies, or genetic defects studies, to fathering versus mothering a child as a specific point.

CHAIRMAN SHEPARD: Excuse me, Fred. You are speaking now about the literature analysis?

MR. MULLEN: I am going into the women's panel now.

CHAIRMAN SHEPARD: But your comments do not have to
do with the literature analysis?

MR. MULLEN: Not with the literature analysis, but we would like to see that references in that analysis, when it goes to print, include references to women veterans, and not just all male-oriented language.

CHAIRMAN SHEPARD: Well, if you are talking about the literature analysis, I think, in fairness to the contractor, he can only deal with what is there. He is not inventing literature.

MR. MULLEN: No, no. Well, you have a summary in there. Anything that can be changed should be changed to reflect deference to sex. Okay?

CHAIRMAN SHEPARD: Okay, if it seems to be slanted, we will be sensitive to that.

MR. MULLEN: Well, it seems there was concern that it slanted the opposite way right now.

We recommend that a pelvic examination is routine in any Agent Orange examination conducted on a woman veteran, and we would like to see that implemented in a guideline to to go out. I don't think that is part of the routine examination of women veterans at this point.

CHAIRMAN SHEPARD: We can ask Dr. Mather when we get to discussions on that point. I have a different impression, but I may be wrong.

MR. MULLEN: Also, they said that less than 2 percent of the Vietnam veteran population is women, which is roughly 7,000, that served during various periods of time. There is concern that some people think that this 2 percent, a study of this 2 percent is going to skew the results of the examination if they are included, if women are included in the overall study.

In specific regard to birth defects, all preliminary data seem to indicate that genetic defects are not transmitted from male Vietnam veterans. If that is the case, then it would seem that if there is an increase in genetic defects, or birth defects in children, et cetera, that the women ought to, in fact, be studied for that specific purpose, because I don't see how you can come out with a valid birth defects study if you only study one of the parents, if that was a

Ģ

CHAIRMAN SHEPARD: I didn't say that. I said that is why it is important to be very specific about what study you are talking about. Now, in a cohort study, in which you are looking for reproductive outcomes in the group of individuals, in this case veterans, who are being questioned, examined, what have you, that will be done presumably.

Unfortunately, as I said, Dr. Erickson was not able to come, and he would have pointed out to you that CDC is proposing a separate study of female Vietnam veterans. Most of us think that to simply have some females included in the larger study as a chance occurrence would not be a good way on which to base any conclusions, and if we are going to do study of female veterans, it ought to be a study specifically designed to answer that concern.

DR. LINGEMAN: This probably isn't the time to ask the question or make a comment, but it is very possible that during the interviews of the parents of these deformed children, maybe some of them might turn out to be offspring of female Vietnam veterans.

CHAIRMAN SHEPARD: I specifically asked Dr.

Erickson that question, and I said, "Do you know of any

female veterans who were the mothers of these children," and

ì

he said, "Not to date." They have not analyzed all their data. He said he can't answer that question. They haven't analyzed that particular question. But just his general impression is that there will be few, if any, mothers of either the cases or the controls who were veterans.

MR. MULLEN: Are they planning a separate study for female Vietnam veterans?

CHAIRMAN SHEPARD: Yes, precisely. That is in the early planning phases. The protocol has not been written yet, but CDC is proposing that, and Dr. Erickson will be up next week to discuss that.

MR. MULLEN: What attempts are being made to recapture -- this is another point -- to recapture the registry data that were lost?

CHAIRMAN SHEPARD: I am not aware that registry data were lost.

MR. MULLEN: Okay, or was not properly classified.

CHAIRMAN SHEPARD: Well, if you are asking me the question, "not properly classified," if you are talking about the first 85,000 ---

MR. MULLEN: Yes.

CHAIRMAN SHEPARD: I would not necessarily agree that it was not properly classified; it was not collected in such a way that we can make very easy use of it. It was not done for that purpose.

MR. MULLEN: If you can't make use of it, it is lost, then, isn't it?

CHAIRMAN SHEPARD: No, the data all there. It is just not computerized in the most readily available methodology in terms of retrieving specific medical information. For example, we can't say the following diagnoses appeared in the first 85,000.

MR. MULLEN: Are you attempting to --

CHAIRMAN SHEPARD: We are looking at ways in which we can do that. Some of our environmental physicians have expressed an interest in going back, and on a sampling basis, to go back into the first 85,000, and try to retrieve the information and recode it, as is now being done with a new code sheet.

MR. MULLEN: Can we recommend that as you identify those veterans, that you send out a letter and ask them to come in for another examination, because the data base and the examination technique has changed to some degree since that time, and not only for the purpose of affording the veteran another examination, but it would seem that it would be a way of qualifying and updating that information that was in the first 85,000?

CHAIRMAN SHEPARD: Okay. We will certainly take that under consideration. I think that is a good recommendation.

ŧ

MR. MULLEN: Boy, what a lousy film, Barclay.

VOICE: I thought it was pretty good.

ì

MR. MULLEN: It was pretty bad. As you know, some of the veteran service organizations reviewed it. We were somewhat assured that we would have a chance to review it and have input before the final cut, which as you know did not occur. It was already finished when we were told that.

Now the film has been released, and much to the dismay of those people who did review it, and to the further dismay of the people who were my subcommittee today. The general consensus is that the film ought to be just scrapped, for two reasons.

First of all, the film is totally condescending toward Vietnam veterans. They are portrayed as fat and bearded and sloppy and out of shape, and some of the reference to them was bordering on the unsavory.

Second of all, the Administrator came out very strongly at the beginning that this is a number one priority, and then we have a little tete-a-tete in a coffee klatch sort of situation, which was expressed by Hugh Walkup as taking a totally opposite view of what the Administrator was saying by portraying to those people viewing the film that everything is on the up and up, it's hunky-dory. It does not jibe. Nobody liked the film. It was not informative. It was more of a public relations film than an information

There was also a recommendation that if it's being used right now, that it be pulled back in until such time as you get another film, or another method of educating your people in the field.

It was brought up that the Subcommittee on Information and Education was being used more as a public relations tool than an information and education panel by the VA. I think based on a review of that film the second time around, I am totally inclined to agree with that.

I think the goals of the administration towards information and education should be much more clearly defined, and less glossy than what was portrayed in that film.

A question. How many environmental physicians are left out of the original environmental physicians who were assigned in '79 or '80, approximately?

CHAIRMAN SHEPARD: If you are asking me, I can't answer that right off the top of my head. I would say there is probably an annual turnover rate of about 15 to 20 percent, maybe a little higher, but that is pure guesswork on my part. Is there some reason for --

MR. MULLEN: Well, it was a question that was asked, and its importance perhaps could be expounded upon by

o

Mr. Walkup if he'd wish.

MR. WALKUP: I think it was raised from the audience at the last meeting, which I did not attend Apparently this question was raised, and so it was being reraised to find out if that number had been found. But behind that was the issue of -- I wasn't here, so I cannot attest to it --

CHAIRMAN SHEPARD: I don't remember it having been brought up.

MR. WALKUP: But that would be a useful number because of the planning around the re-education or training of the environmental physicians. With a 20 percent turnover, it has been three years, that means that over half of them have not received at least the same thing, and the other half have received something that is three years out of date even though they have been updated.

There was some concern about the delivery of training and uniformity of environmental physicians.

CHAIRMAN SHEPARD: May I just say a word about that? We are continually updating our information. We have a variety of ways of keeping our environmental physicians informed, which is an ongoing process. It is true that it has been a while since we have had a national educational conference.

It may have been brought up -- it was on the agenda at your information meeting -- that we are working

toward having another national educational conference. That would depend on the availability of funds, as to whether we can do that or not. But in the meantime, we have, on a very frequent basis, both by conference calls and by mailouts, have been keeping our environmental physicians informed. So I on-going think it is accurate to say there is an dialogue. So I don't think that the environmental physicians would necessarily be out of date because they hadn't attended an educational conference per se.

MR. MULLEN: Along that same line, I think we recommended at the last meeting that the VA put together a team specifically designed to police the Agent Orange examination of activities at each VA medical center to insure uniformity and quality in those examinations.

Was that, in fact, forwarded to someone who could possibly respond to that in a responsible manner?

a couple of things have happened. As you may know, there is office in the Department of Medicine and Surgery which does precisely that in terms of the overall quality control monitoring aspects of that Department of Medicine and Surgery.

We have had a couple of good briefings and meetings with that group. We gave them a briefing on the Agent Orange Program, and they gave us a briefing on how they operate. We

are now starting to integrate. Nancy Howard, who is a member of my staff, will be assigned as part of the inspection team that goes out from Central Office from time to time to do this.

In that process, she will get a much better feel for how the inspection teams are actually doing the evaluation of the Agent Orange Program. That is one way. The other way is that we are re-examining the criteria by which these SERP teams, as they are called, evaluate the local program.

A third way is that there is an internal review process, and we are taking a look at trying to standardize how VA hospitals examine themselves in this regard. Yes, we have taken up your recommendation and are acting on it.

MR. MULLEN: And the last thing. Apparently some of the committee members in the audience are at odds about the information that was relayed by the administration. This regards our concern over the supposed comments of Dr. Young in the media that was brought up at our last meeting. We asked that the VA either ask for a clarification by the press, or that a retraction be made. What was the final action by the VA on Dr. Young's press release, the ones to the Chemical Society?

CHAIRMAN SHEPARD: When you say "press," you mean the reports of the interview or the press conference that

they had?

MR. MULLEN: The big hullabaloo we had last time around.

CHAIRMAN SHEPARD: Right. Okay. A letter, as you probably know, was sent by the Legion to the Administrator, and that letter was responded to, and we can make copies of that letter available to you.

MR. MULLEN: But from what I understand, the Administrator did support Dr. Young's statement in the press, or was a retraction effected?

CHAIRMAN SHEPARD: I don't know what you mean by a retraction, Fred. If you are talking about how it was dealt with in the press, I am not aware of anything that the Administrator did directly with the press.

MR. MULLEN: What I am getting at here is I was led to believe that the Administrator supported Dr. Young's actions, and that the press more or less used poetic license in reporting the news. Some of the audience participants at the subcommittee were led to believe that, yes, the VA did in fact ask for a retraction.

Now, for a point of clarification, I am just trying to discern which happened.

CHAIRMAN SHEPARD: I am not aware -- and I can't answer for all the Administrator does, obviously -- I am not aware of anything that was done by the Administrator to

ask for a retraction on the part of the press. It is true that the press did misquote Dr. Young in some respects.

The specific example that comes to mind is that in talking about the Agent Orange Registry, that the impression was made that the VA was planning to set up a control group for the registry, and that clearly is not the case.

ever heard such an idea. I don't know where that idea came from. I am sure that it wasn't Dr. Young, because he doesn't have any such notion that we would be setting up a control group. I think that was just a misinterpretation of what went on.

I was not personally at the news conference, so I can't say from personal experience, but I know that is one example. A statement was made in the press.

It was not attributed to any one person, so I can't even say where it came from. But that was clearly a misstatement, in the press, of the facts.

MR. MULLEN: Just two more items. We had a request that someone from the VA Women's Advisory Group be made a panel participant or a subcommittee participant. Since we did reach that gap in our subcommittee today, we would like to keep that ongoing by having a regular member on our subcommittee from the Women's Advisory Group.

CHAIRMAN SHEPARD: We can certainly take that under

consideration. I am not sure how many vacancies there are on the committee at the present time. I think we can effect the same thing as we did today, and invite members of that committee to attend our committee, and hopefully vice versa, on-going dialogue, so I think the result can be effected. We will certainly take your recommendation -- I gather your recommendation is that we ask or explore the possibility of having a member of the female veterans Advisory Committee actually serve as a member of this committee. Is that your suggestion?

MR. MULLEN: Yes.

CHAIRMAN SHEPARD: We will certainly look into that.

MR. MULLEN: And last but not least, we do opt for the lay language summary of the literature review. We feel that it is necessary.

CHAIRMAN SHEPARD: Thank you. Any questions or comments to Mr. Mullen?

(No response.)

CHAIRMAN SHEPARD: Very good. Thank you very much, Fred. Dr. Hodder, can you give us a summary of our other subcommittee's activities?

DR. HODDER: We had a fairly busy agenda despite the inability of Dr. Erickson and Dr. Mulinare to be with us. We still managed to run over to a certain degree. We

had presentations which we had asked for last time on 1 research efforts being done in the states' Agent Orange 2 commissions or other organizations. We had reports from 3 three today. who Dr. Anderson from Texas/ had made a brief presenta-5 meeting, last / told us some more about what his state was 6 doing. He mentioned that the program started really three 7 years ago, and like many programs, was aimed at predominantly 8 giving assistance to the Vietnam veteran, and was not set 9 up for research. 10 However, as so often happens with health service 11 organizations, or similar organizations, basic 12 information is needed and / becomes part of the effort. He 13 described six protocols that were done 14 or reviewed by the University of Texas, three which 15 are particularly active now: a profile of immune systems, 16 sperm counts and cytogenetics. He / mentioned a mortality 17 study which had to be stopped; "t wasn't feasible because of 18 the small number and the fact that most people were dying of 19 the expected diseases. There would not have been enough 20 power in the study. 21 other

He shared with us some problems that studies for example,
might run into,/the difficulty in finding controls.

The problem

with management information systems using different

22

23

24

computers, and he gave us somewhat unique ones that Texas has and the state of Rhode Island does not -- which is the large geographic area.

and mention

I will take these out of sequence of presentation/

the other state presentations. Dr. Reiches presented the

Ohio program which I gather is just now gearing into its

public phase by sending out three pamphlets, two

of which go directly to the veteran.

One is just information to the veteran, a simple education pamphlet with a brief questionnaire. A second one, which gives more health information, includes a more detailed questionnaire and physical form. This is filled out by the veteran and mailing goes directly by his physician. And finally, a third/ to all the physicians licensed in the state. It gives the physician of Agent Orange background information on the health effects/and what the study is attempting to accomplish.

She mentioned that at this phase, they are particularly interested in public education, as well as beginning a surveillance network. The Phase two study will be \$240,000 a year, and that is just being developed at this point.

Finally, Dr. Peter Kahn presented three studies
that were being done at New Jersey: a mortality study which
will have controls who have not served in the armed forces

Q

and veterans not serving in Vietnam:

Therefore, they

have dual controls.

Q

He mentioned that the state has the death certificate data coded already, which is an advantage, and they
also
can/identify veteran status.

A second study will be a preliminary look at soft tissue sarcoma. He mentioned some of the difficulties predominantly about the small size, and it would take probably a longer time to get an adequate number of cases. However, it should be at least able to be done, if nothing else, at a higher risk factor or lower power. It may not be able to get down to a 2 to 1 risk. The power may not be enough for that. It may have to be a three- or four-fold risk to be picked up.

Again, the advantage is/they have a good cancer registry which is linked with the SEER network. A very interesting study he talked about was the possibility of identifying either dioxin or a product of dioxin in the blood even considerably later after heavy studies in exposure. He related this back to Japan, in which they found traces of chemical 11 years later.

He plans a simple study, looking at 50 heavily exposed individuals who were either sprayers or any other military occupation that would have experienced heavy contact

with dioxin. He would have two unexposed controls, one a veteran who would not have been in Vietnam, and one who had been in an area of Vietnam which had very little risk of exposure.

He described the protocol of how this would be done including a fast to hopefully force breakdown of the lipids and release some of this material into the blood.

presented some of the basic science research that was being done in the veterans organizations, the veterans hospitals. He had four basic samples or illustrations of these research projects, actually representing 10 ongoing applicants projects out of 36 / that were chosen by a panel of experts as being meritorious projects.

All of these started in August of '82. The first by one presented Dr. Peter Sinclair was looking at Porphyria the compensation cutanea. tarda. He recalled for us that in bill, this was one of three criteria for presumptive exposure to dioxin.

The area that he is trying to study is the mechanism by which TCDD would inhibit the enzyme system going from the precursor ALA -- and I don't remember what ALA stands for -- to hemoglobin. The chemicals block this and force side production of uroporphyrins which are the agent for the skin toxicity, and they would be looking into

ó

transmitters.

this. He is using a cell membrane system to do that.

The other studies presented, just quickly, are a neuromuscular toxicity study being done in the Baltimore VA, looking at behavioral and physiologic outcomes, and also the biochemistry of some of the

Another study being done on behavior and stress by Dr. Shelton, and I don't remember where that is being done -- at the Madison, Wisconsin, VA Medical Center. He is using Rhesus monkeys.

A final one, Dr. Puhvel from Los Angeles presented the biochemical aspects of Chloracne. She reviewed the pathology of it, and presented the studies they are doing on the enzymes in keratinization to explain Chloracne.

Then, we moved to case control studies, the soft tissue sarcoma studies that Dr. Han Kang and his associates are doing at the AFIP. He gave a quick summary of the pros and cons of the association of STS with dioxin. Then, he reviewed the study, which has been presented several times here, and I needn't go into that.

What they have looked at is 5,015 cases of soft tissue sarcoma; 440 of these would meet the criteria by time, age, and male sex, and these will be looked into further. He also mentioned that this study has been presented to the AFEB and he discussed their comments.

A

B

ö

He also presented the mortality study which is at the phase now of setting up the system to collect data, and then Dr. Kang stepped through the process of how the data would be handled to identify cases and get their records.

He then had two of the subcontractors in the study, Ms. Kokiko from Moshman , who explained the processing the death record data, and Mr. John Ward from Westat, who talked about the approach they would use to verify military status. They presented the formats and the forms that they would use.

The final presentation was Dr. Annemarie Sommer who presented the outline of her monograph on birth defects, genetic screening and counseling. She talked about some of the principles of organizing the birth defects and these would be organized and presented in her monograph, which will be available fairly soon, I gather.

CHAIRMAN SHEPARD. Fine. Thank you very much.

Are there any questions, comments from members of the committee for Dr. Hodder?

MR. WALKUP: Did you learn anything more this time or about what Agent Orange might do to humans, did you learn anything more about when we might know something more about that? I had a hard time following a lot of what you were saying. Is there any outcome at this time that tells us something more?

DR. HODDER: No, I don't think there is something

23 24

25

which -- first, today, what we were looking at was what studies were in progress. It was more information gathering for the committee than it was anything in terms of what I guess you would call an outcome or a product.

I think we will be able to say something more in evaluation of an outcome when someone is presenting a final study, and saying this is what we conclude. I think then the committee can perhaps review it and give a statement.

MR. WALKUP: That is what I thought I was hearing. One other thing that I wanted to ask was Dr. Schulz, in our committee and as followup to his comments earlier this morning, in talking about the lay person's exposition of updated literature review, said that he thought the time had come when there were some things that could be said about Agent Orange, about the general area that we are talking about, some conclusions that have been reached; some things that we can predict are going to be known within the somewhat near future, the next five to 10 years; and some things probably we will never known, and that science cannot give the answers to many of the questions that are being asked of it.

Do the scientific panel members agree with that assessment?

CHAIRMAN SHEPARD: If I may put my two cents' worth in. I think we have to be very specific again.

very difficult to generalize in an area that is as complex as this in terms of speaking of specific studies. I wasn't there when Carl gave that part of his presentation, but I would agree that there are some things which we are close to being able to answer, if not being actually able to answer.

It may be important to sift out those things on which we can draw conclusions as of the moment, project which studies will lend themselves to drawing conclusions, and then probably cite some questions that may never be answered.

But it is difficult for me to say, yes, that is.

To the extent that I have said that, then it is in agreement what was said earlier.

with / I just speak for myself now, not as chairman of the committee.

Dick?

DR. HODDER: I think that addresses really two questions. One is the degree of certainty. Science never really does give you anything with 100 percent certainty. What we try to do is refine questions and hope that our probability of being right gets closer and closer to a certain level that we are willing to accept.

But the other thing that I think is important, at least to me, in the papers that we have presented, we are really not at a phase where we are trying to get definitive answers.

Since most of these studies are at a

fairly early phase, we are really trying to make sure that

are not flaws in the design, which, when / come

rolling in, are going to make them invalid. Certainly, if

in advance;
we can find out something/ you know, a lot of studies

years ago, wouldn't let any of the information out about their design until they presented it, and then they find out that they have made a significant mistake, and many years of work would be wasted.

We are really at a very early phase, and not very many studies are completed. We are just trying to make sure that when these studies come to fruition, completion, that a key variable was not left out. That is why the ranch hand took so long to design and why so much time was spent on the CDC study.

MR. WALKUP: For the veterans and for our committee in particular, that is a very important question that keeps getting re-raised, and especially after seeing the public relations' video tapes that we viewed today. A point that the VA was continually making through those was that we were awaiting the definitive outcome of scientific studies.

The think that has been / position for a long time.

I think that pretty soon we are going to have to bite the bullet and say, "No, we are not going to know some of this stuff, and we are going to have to deal with probabilities, and it is going to be a very long time," and start

telling people that and basing policy on what definitive conclusions scientists have given us, which are going that to be a very long time, and/we are not going to know some of it.

Thank you.

B

CHAIRMAN SHEPARD: I would like now to call on Dr. John Levinson who has been patiently waiting. Dr. Levinson has had a long-standing interest in the whole area of health. He is an obstetrician and gynecologist from the Wilmington, Delaware area. He is a consultant to the Veterans Administration, and has a long-standing interest in this area. I am very happy to have you here, Dr. Levinson. AGENT ORANGE: A PERSPECTIVE ON RESPONSIBILITY Dr. LEVINSON; Good afternoon. You should understand something of my background if you are to understand my perspective on today's subject.

At the age of 17, during World War II, I joined the U.S. Navy, and served as an enlisted man. I was proud to do so and thought my country treated me very well. Being a veteran in those days was something special.

Today, I am a practicing physician in Wilmington, an Associate Professor of Obstetrics and Gynecology at Jefferson Medical School in Philadelphia, and serve as the President of Aid for International Medicine, which I founded in 1965 out of my interest in the medical needs in South

Vietnam.

ó

θ

Q

Twenty years ago I made my first of 15 working visits to Indochina, the majority self-financed. I have worked in hospitals, I have worked in clinics, I have taught surgery in Cambodia, Laos, South Vietnam. I have taught surgery in North Vietnam, and I have done surgery under combat conditions.

In 1967, I traveled with Senator Edward M. Kennedy as a medical consultant for his Senate subcommittee to South Vietnam. On January 8th, twenty years ago, I found myself perched in a helicopter 2,500 feet above War Zone C Below was a moon scape of bomb craters and defoliation stretching for miles in all directions.

This was a shattering experience that I shall never forget. Over coming days, reports filtered in on fetal abnormalities and high rates of miscarriage from Tay Ninh province. Regretably, we could not research these allegations attributed to defoliating chemicals as we were overwhelmed dealing with the massive problems of civilian war casualties and the plight of milliones of refugees.

But I truly have never forgotten that day and continue to search for answers. As you know, between 1961 and 1971, over 20 million gallons of herbicide were sprayed around Indochina. Mounting protests from the scientific community, citizen groups, and strong political pressures

are credited with halting this form of chemical warfare. In spite of approximately 2,000 scientific articles on herbicides, including phenoxy herbicides and associated dioxins, we have few firm conclusions as to the long-term effects on man and the environment.

Realistically, where are we in solving the puzzle?

The millions of veterans of the Vietnam conflict have a right to expect that the Veterans Administration can answer their questions, give counsel, and proper medical care. It is apparent that many of their expectations have not been met.

In December 1979, mounting national concerns on Agent Orange disease processes, and on the inadequate responsiveness of the Veterans Administration led to the creation of the Presidential Interagency Work Group on phenoxy herbicides and contaminants to coordinate all federal research efforts and to study long-term health effects of herbicide exposure in South Vietnam.

Following dilatory handling of Agent Orange research by the VA, Congressional protests of 1982 led to the Centers for Disease Control in Atlanta to have the lead role in the federal research effort.

The Australian Senate report on Agent Orange studies failed to recognize most of the alleged effects of herbicides and other chemical agents on the 49,000 Australian veterans of the Vietnam conflict. A royal commission is

about to re-hear the data. However, they do acknowledge many emotional problems, psychiatric problems and general readjustment problems in Vietnam veterans.

ī

The work of Dr. Van Tigglen in Australia and Holland in pursuing cerebrospinal fluid abnormalities related to dioxin raises the strong suspicion of toxic neurasthenia. These studies should be followed and enlarged upon by U.S. scientists, as we too have an overwhelming number of Vietnam veterans with emotional problems, psychiatric problems, and general rehabilitation problems.

Possibly there is an organic basis for the socalled post-traumatic stress syndrome that well may be the most significant medical problem to emerge from the Vietnam conflict. In good conscience there is no way we can afford to pass up on any potential leads to deal with these tragedies.

The often quoted Seveso accident in 1976 has been most carefully studied. A critical review of their data fails to substantiate early concerns of increase in birth defects, cancer and many other medical conditions. However, 200 cases of chloracne were found, and I find this hard to reconcile with only 10 documented cases in the 125,649 initial physical exams and the 29,775 follow-up examinations that were done through the end of September of this year for the Veterans Administration Agent Orange Registry.

In May of 1982, I spent two weeks in Vietnam as an official guest of their ministry of health. My purpose was to study the results of the chemical warfare. Although I was impressed by the tremendous number of liver cancers in Hanoi, by the increase of patients in hospitals in the south with trophoblastic disease, and many other health allegations due to toxic chemicals, I left with faremore questions than answers.

In January of this year, I returned and spent one week reviewing medical records at the Tu Du Hospital in Ho Chi Minh City. Unfortunately, the data collection is so poor and there are so many variables, that serious doubts cloud their conclusions. The following week, "The International Symposium of the Long Term Ecological and Human Consequences of Chemical Warfare in Vietnam" convened in Ho Chi Minh City.

The conclusions of the symposium shed little new light on the problems. Considering the tremendous population shifts during and following the war, and the largely unknown amounts of individual exposure to defoliating chemicals makes research difficult. The overwhelming lack of laboratory facilities and the limited understanding of the Vietnamese scientists on how to gather raw data and how to do a proper statistical analysis, makes all of their conclusions open to serious question. A classic example is the 5 plus fold

*7* 

increase in primary cancer of the liver at the Viet Duc Hospital in Hanoi. Is the increase really due to toxic chemicals, or is it due to the fact that it is probably the only hospital in the country that can do this type of extensive surgery for liver cancer and hence they have more referrals; or is it due to the fact that there is better transportation now that the war is over, or is it due to the fact that they have time for this type of surgery, or is it due to Hepatitis B? It is known that Hepatitis B is endemic in Southeast Asia, and that contracting that disorder increases the chance of primary liver cancer approximately 300 times. With no laboratory facilities to document Hepatitis B, how does one attempt to study any of this? We cannot blame the defoliating chemicals without good hard data.

Following the symposium, a group of U.S. scientists offered to set up a bilateral research program with the Vietnamese for further study on toxic chemicals and its effect on man and the environment, in the hopes to benefit the Vietnamese as well as ourselves.

I have discussed this with members of our Congress and they have expressed great interest in the project. U.S. industry has offered funding. Regretably, after 10 months, the Vietnamese have not yet appointed a committee to work with us. Private Vietnamese sources suggest that the political

rhetoric about the chemical warfare is more important to them than a constructive approach.

In the weeks following the symposium, some members of your committee met with several of the U.S. participants.

I was surprised that you only interviewed nonphysicians and mainly individuals who had never been to Vietnam previously to give you a better perspective on the meeting.

You could have done better.

Some five years ago, a VA medical director urged me to offer my assistance in the Agent Orange research because of my knowledge of Vietnamese medicine. After hours of fruitless phone calls to reach key individuals, with none of my calls ever being returned, I gave up my efforts.

Over recent months my frustrations have mounted in trying to see what, why, and how the VA is helping our Vietnam veterans. One of the several hundred VA outreach programs is exactly next-door to my office, and daily I see these distressed men seeking help.

Their perception of what the VA medical system is doing for them is very, very poor. My own investigations at various facilities and outreach programs where I have had the opportunity to talk with physicians, psychologists, nurses, and other personnel verify many of the veteran's complaints.

Veterans complain of waiting for up to six hours

for a 15-minute history and physical by a physician. The physicians claim they are too busy with routine matters and they have little time.

are not of great concern. But can't someone take a few minutes to explain to an emotionally drained, scared, exserviceman, who is now out of a job, what it is all about?

When the armed services needed recruits, their questions were answered. Why not now?

In the summer of 1980, the Vietnam veterans in Wilmington, Delaware, staged sit-ins in the hospital lobby as a protest to the way Agent Orange exams were being conducted. The hospital director responded intelligently by appointing a special Agent Orange nurse.

This dedicated nurse spends 1 hour with a veteran to learn where he served in Indochina, discusses where he may have been exposed to toxic chemicals, and gets a good history on his health problems.

Then, after his 10- to 15-minute physical and various laboratory tests, he returns a month later to see her, receives the reports, and discusses anything further he may wish. Indeed, I have no first-hand knowledge of all the

VA facilities, but I think the approach in Wilmington is unique, bears study, and might offer a little "humaness" to your Agent Orange Registry.

Dr. Ronald Codario of Philadelphia makes much of the elevated porphyrin levels in urine of the many hundreds of Vietnam veterans he has studied. He feels these changes are directly related to toxic chemicals and to a multitude of symptoms.

As a scientist, I strongly question his data and would like to suggest that tests of this type be included with the VA Agent Orange physical exams. Codario receives 11 pages of coverage in the book, "Waiting for an Army to Die - The Tragedy of Vietnam" by Wilcox.

This paperback contains much sensationalism, but the distressed veteran and his family read it, and they tend to believe it. The VA has an obligation to counter this with good research and either prove or disprove him. When will you seize this opportunity?

In July 1983, VA medical officials spoke in Philadelphia on the Agent Orange physicals. Many of the individuals that attended these talks felt they were insulted, the manner of presentation was patronizing, and the individuals from Washington really lack an understanding on how the hospitals are handling the problem.

I am told that the "traveling road show" scheduled

66

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

to hit 9 cities was soon abandoned.

Clerks who enter the Agent Orange physicals into
the computer do not have codes for many of the vague signs
and symptoms, so the information is not entered. The symptoms
of depression, sexual problems or lack of libido cannot be
coded from one area of the Agent Orange Registry code sheet,
so how accurate will your data be?

On the November 21, 1983 Agent Orange conference call, Dr. Shepard expressed concern because the GAO is gearing up to re-study the VA Agent Orange Registry process, coding, et cetera.

He pointed out they were very critical of the VA in their first study. He stated that if the review was also critical, excuses would not hold up, and the vulnerability of the VA was discussed. Furthermore, he mentioned that the VA was not getting out follow-up letters in a timely fashion. The concern seems to be to protect the establishment, not to learn what the problems may be with the men who fought and survived in that miserable war.

At the same conference call, Nancy Howard complained of the quality of the code sheets, of repetitive errors and instructions not being followed. She complained that some charts were sent in without history and physicals, with no entry for neoplasia, and with complaints incompletely listed. Many facilities doing exams were not using the

proper forms. She made a plea for total compliance.

Several people explained why various studies would take longer than anticipated and the monograms and video-tapes that were being prepared on toxic chemicals for the veterans would not be available for many months to come.

As one of your professional staff said to me in private, "We have been having these conference calls every few months for years - they always promise things that never come through."

I am sure I have upset some of you this afternoon, but after my 20-year personal involvement in Indochina, I feel I have the right to be heard at this forum. When one has sweat, when one has cried, and when one has been shot at in Indochina, you learn to talk very straight. I implore that you move ahead rapidly with your studies and do them well, and have a greater sensitivity to all the veterans and particularly those with the post-traumatic stress syndrome - which might possibly be Agent Orange-related.

In real straight talk, the Vietnam veterans have gotten the short end of the stick. I feel they deserve a lot better.

Thank you.

(Applause.)

I will be glad to answer any questions. I assure you I can verify everything I have said.

B

1.5

CHAIRMAN SHEPARD: Thank you, Dr. Levinson.

Are there any questions for Dr. Levinson?

DR. ANDERSON: I have one. It relates to what was brought up earlier here. Do you think that a pelvic examination in a female Vietnam veteran would serve any purpose unless the physician accomplishing it has certain things pointed out to him to look for? Being a physician myself, I like to have people say here is something to look for, here is some guidance, just don't do a physical examination. How do you feel?

DR. LEVINSON: Well, I am a little perplexed. I think, as physicians, anyone doing a complete physical ought to be able to make some basic judgments whether there is normalcy present in the organs involved, and if there is a problem, have a specialist see the patient.

But I indeed think every lady that is getting an exam for this or anything else deserves a pelvic. We have a lot of unanswered questions in the reproductive area, which have not been researched at all well, and we have a lot of accusations in Vietnam that I cannot prove. Their data is just beyond any realm of trying to understand it.

I think it would be worthwhile.

CHAIRMAN SHEPARD: Any other questions or comments of Dr. Levinson from the committee? We will open questions from the floor in just a moment. Any other comments or

questions from the committee?

(No response.)

CHAIRMAN SHEPARD: Fine. Thank you very much,
Dr. Levinson. I appreciate your candor.

DR. LEVINSON: Thank you very much. COMMENTS AND DISCUSSION

CHAIRMAN SHEPARD: The time has now come for us to open up questions from the floor. If you would please rise and identify yourselves so we can get your name.

While you are coming up, there were two questions that were forwarded to me earlier.

I am not sure to whom this is directed, but let me just read it anyway. "Hasn't Dr. Rappe from Sweden found ways to isolate or detect degrees of isomers in dioxin?" My knowledge would suggest that he has. I think the answer to that question is yes, he has found ways to isolate and detect degrees. When he said degrees of isomers, I presume that to mean differentiating one isomer from another. I think that has been clearly established. I cannot speak for Dr. Rappe himself, but I know that other analysts, other chemists have been able to.

Jimmy?

MR. RICKETTE: That was my question.

CHAIRMAN SHEPARD: Maybe you can clarify it. Did

I answer it? The answer is yes, if you

are talking about distinguishing one isomer of TCDD from

another.

ó

П

MR. RICKETTE: Yes, but I asked Dr. -- I can't remember the name --

CHAIRMAN SHEPARD: Dr. Kahn?

MR. RICKETTE: Dr. Schulz, and I didn't feel it had anything to do with information and education.

MR. MULLEN: He brought it up in his testimony.

MR. RICKETTE: Okay, but this is a scientific panel. I think there are more people here that would be better able to answer that.

DR. KAHN: I will answer the question. He does dibenzofurans. have complete isomers, specific analysis for dioxins and /

CHAIRMAN SHEPARD: The other question is can't the specific isomer of dioxin, that was used in Vietnam, be still found in the bodies of Vietnam vets?" There are some other questions, but the answer to that is yes. The feasibility study which the VA engaged in did address that 2,3,7,8 question, and it is possible to isolate the / isomers of TCDD, so the answer to that is yes, and it has been done, and it has been done in other laboratories.

The chemist that did it for the VA under contract was Dr. Michael Gross at the University of Nebraska. The second part of that question, "or the soil in Vietnam?" I don't know of anybody specifically who has analyzed soil from Vietnam, but I know the technology exists for doing analysis

of soil, and it has been done by the EPA at Times Beach and other areas, horse arenas, and so forth. So the technology does exist for isolating isomers of dioxin and furans from soil.

The second question, "While Vietnam veterans are waiting for the answers, what are we supposed to do? We have been waiting since 1978."

If Vietnam veterans are worried about their health problems, there are a number of options open to them. They are eligible for the Agent Orange examination which we have talked about, and they also are eligible for health care.

Now, when you say, "What are we supposed to do," it is very difficult for me to answer that. I think, in general terms, I would say that Vietnam veterans should keep themselves informed as to the progress of studies, to avail themselves of the opportunities that exist within the VA and other agencies, the state agencies, and so forth. Our office is always available for discussions on any particular concern to veterans, so I think there is a lot that you can do.

I guess probably one thing that we all have to do is to be patient. These studies take a lot of time to do.

I hope that Vietnam veterans would agree with me -- I am also a Vietnam veteran, as most of you know -- that if we are

going to do studies, they ought to be done well. It would be inexcusable, in my view, to do bad studies simply because we need to get the answers quickly. Studies of this type, given the complexity of the problem, cannot be done easily.

Dr. Kahn can certainly attest to that. He has
been at it for some time now. It is not an easy question.
But I think it is also accurate to say that a tremendous
amount of effort has been put forward. The Federal Government, the VA and other agencies, has expended a
lot of time, effort, and money in trying to get the answers
to these questions, so be patient. Ask questions. Hopefully,
we will be able to answer your questions as they arise.

MR. MARTIN: We have a few questions, Dr. Shepard.

My name is David Martin, Vietnam Combat Veterans Coalition.

I am an infantry combat veteran, so therefore I have a question about exposure. I keep hearing about your Ranch

Hand. As an infantry combat veteran, you know, I have a very hard core approach toward the term "Vietnam veteran."

I think I am, and I think Frank is, and I think that 10 percent of us, who actually were out in the bush and fought that war are the Vietnam veterans. You know, we didn't change our clothes, we didn't shower at all for up to two and three months, and we were in that area. We walked through that area. In this videotape we heard about earlier, it was talking about insecticide. I don't know how dumb Mr.

Walters thinks we are, but I can tell the difference between insecticides and herbicides because when I walked through an area that has been defoliated and the leaves are falling, I don't assume that was an insecticide. I assume that was a herbicide.

when I see the planes flying overhead within .5 meters from my position, and a few days later the trees are defoliated, and I have to walk through that area and sleep in it, and drink the water, you know, I didn't have access to cold beer or canned soda, I drank that water, and I slept on that ground, and I walked through that area.

Now, if I didn't change my clothes, and if I didn't shower for like two months, and somebody back here is expecting me to believe that a Ranch Hander who went out on a / spraying mission for an hour, came back and showered, changed clothes, had protective clothing, and also had Vietnamese -- I know how the Air Force worked. You know, I was in the Marine Corps, but I know how the Air Force worked.

They had an indigenous population, the Vietnamese handling that stuff, -- you know, I have a toughtime believing that, and if you have any further information on it, you know, I wish you would inform me. But I think our exposure index was a hell of a lot higher than any Ranch Handers were.

CHAIRMAN SHEPARD: Certainly, that is a concern,

and it is a concern of ours. I would hope you would agree that it is different. Certainly your exposure was very different from what the Ranch Handers were. Whether it was more or less, I think it is going to be very difficult to determine. I would hope that you wouldn't have the impression that anybody in the VA thinks that you were not exposed. Certainly the record is clear that the VA accepts the fact that the ground troops in Vietnam were exposed, and some of them were heavily exposed.

so I don't think that is anything that the VA is trying to deny. I think the point we are trying to make is two things. First of all, the exposure was probably different, as you have already alluded to. Whether it was heavier or not so heavy, or the comparison of the degree of exposure, I think is a question that is going to be very difficult to answer. I am not sure that we will ever be able to answer it. That is one of the scientific questions that we will probably never be able to answer, what was the level of exposure of the ground troops in Vietnam in terms of the amount of exposure, documenting that.

The importance of the Ranch Hand study is that we can identify and have identified those people. We are not trying to say that they were any more exposed, or that study is any better a study than any other study. It is another study. It is a group of people who were readily identifiable,

MR. MARTIN: Concerning that, on this videotape
I just saw, you know, the priority of the ground troops,
you know, that Mr. Walters said that it was light exposure,
and he put down the Ranch Hand as heavy exposure, and I just
saw that like within the last three or four hours.

MR. RICKETTE: And they named specific areas.

MR. MARTIN: It was the videotape we saw this morning.

CHAIRMAN SHEPARD: That the ground troops were lightly exposed?

MR. MARTIN: That is a quote, yes, it is.

CHAIRMAN SHEPARD: I don't remember it.

MR. RICKETTE: I question that very much. Also,
Dr. Levinson touched on it, about the humanistic view. If
this Veterans Administration considers themselves what they
put right in front of their building in big bold letters
underneath the Veterans Administration, "To help he who
fought, did the battling, and his orphans and his widows,"
then why can't he give us the benefit of doubt instead of

₿

ground study.

2 3 4

studying this damn thing to death? Eighty-six damn studies going on right now, and you are talking about another one with women. Now, how many studies do you need? I mean, you know, a lot of us are sick. Some are dying. We are dying slow deaths.

Let's talk about the humanistic point of view here, what it does to a person's mental and physical conditioning every day of their life. Let's talk about that. That is the main point here. Every God damned person in this room except Dr. Levinson, Dave Martin, and myself are missing the whole God damn boat, because that is what we are talking about here is human life.

If you call yourselves doctors, then examine yourselves and examine what I am talking about, because I am fed up to here. I have gone to the VA system through the state of New Jersey. I have been to everywhere, and I am sick, sick and tired. My family is sick of hearing about it, and I am tired of talking about it.

That is all I have to say.

MR. MARTIN: Yeah, and we have been at this since -- you know, like it hit the papers in '78, you know. We are not all asleep. Even though like we live in dioxin Jersey, noxious Jersey, you know, like still we are not that dumb up there, and we read the papers, and we follow the articles, and we watch the stuff on TV, and we buy the books,

and we hound our Congressmen and our Senators to death, and we get all of the information we can, and we still find out when we come to places like this, there is information that is like either withheld from us either by incompetence, by negligence, by design, or whatever it is.

Like Frank and I go out of our way to find out this information. We go out of our way to research this stuff. You know, it is like Marc Williams can tell you from the New Jersey Agent Orange Commission, we go up there and we are there all the time. We write letters. We are all the time trying to find out information about this stuff, and we come down here, and we find out stuff that we have never even heard of, and we see tapes that irritate us, you know.

We have been in this since 1978. You know, it is like six years. '84 is around the corner. Except for the fact that, you know, like Dr. Levinson said, you know, we are a little bit scared about this, you know, and like, you know, paranoia is a definition which you can argue about for years, but, you know, whatever you want to say about it, you know, like we are worried about it, and we are concerned about it.

You know, it has been a long time, you know, since I have saluted that flag or cared anything about that thing, but yet the fact is that I put more communists in the grave

Q

ø

than anybody in this damn room, you know, and I did it willingly, and I did my job. For like 10 years after that, I kept my mouth shut, and I didn't have anybody. There wasn't any vet centers. There wasn't anybody to talk to. There wasn't any priest. There wasn't any ministers. There wasn't any family. There wasn't any friends. There wasn't anybody to talk to. There wasn't any psychologists.

You have, I have a Master's degree. I have got six years of education. The college campuses in '70 and '71 wasn't too great to be at. You kept your mouth shut. In '78, the only thing that broke my back, you know, in this whole thing was Agent Orange. When I found out that no matter what I could try and bury, or put under, or try and just like forget about psychologically, you know, then I have got to worry about a physical problem that might catch up to me.

I would like to live to be 40. I would like to live to be 45. I am still worried about my two little girls which I will never see again. They are in Seattle, Washington, for one reason or another. I worry about their health.

I worry about the two miscarriages from a previous marriage. I worry about these things. I worry about the genetic damage that maybe I put in the system by having like two little girls. What is going to happen to their kids, or after that? You know, this whole problem

is like, you know, it is like profound to a Vietnam vet, a combat vet, an infantry vet. It is our life. Frank and I do this like morning, noon, and night. We do it all the time. We have been doing it and doing it, and yet all we get from the VA is like a bunch of studies, or, you know, like one of our other partners say, a bunch of rhetoric, and that is all we get, you know.

And like, Dr. Shepard, I don't want you to take this personally, but, you know, that is my opinion about the VA, and that is my opinion about -- and the VA being one of the largest bureaucracies for this country, unfortunately, it has become my opinion about this government, and like I go back to Dow Chemical and Monsanto and Hercules and Hooker and Dupont and the rest of them, and Diamond Shamrock, you know, and I think that they have pulled such a massive con game on this country. They have like stripped everything from it.

They have stripped our religion, you know, our belief in our country, and now they are trying to strip our physical well-being. I think if the VA wanted to do something, it should go after Dow Chemical, and they should make them pay. I don't care if they go out of business. I don't think the American taxpayer should pay for it, and I don't think Frank or I should have to pay for it. I don't think my two little girls in Seattle should have to

Ó

В

pay for it. I don't think their kids should have to pay for it. I think Dow Chemical should have to pay for it.

That is all I have to say, sir.

CHAIRMAN SHEPARD: Any other comments or questions from the floor?

DR. ANDERSON: I have one. When the state programs met for lunch today, it was brought up that there were some good presentations at the scientific panel this morning, and we were wondering if chese are going to show up in the general transcript or not, because we felt some of these were worth being in there.

I know that Dr. Hodder's report will be in, but if some of the presentations themselves will be included.

CHAIRMAN SHEPARD: You may have noticed that my secretary was taking notes and transcribing most of the proceedings of that. To the extent that we can capture that, we will. These were not definitive reports. As you know, these were status reports of these studies.

DR. ANDERSON: We realize that. Some of them were good. They had some good material in them, and they should be included. No criticism, though.

CHAIRMAN SHEPARD: I just wanted to be straight about that, because we haven't been transcribing everything verbatim in subcommittees. The reason for that is, in part, by virtue of the fact that I think it provides for a

little freer flow of conversation, informality, so I think we can share information a little more freely.

DR. ANDERSON: My thought was that some of this might be lost, because it was good material.

CHAIRMAN SHEPARD: Well, the studies are all ongoing, so that certainly the data that is accumulated will not be lost. These studies are in progress. We will have enough of that, and I think will be included in our proceedings.

DR. ANDERSON: Thank you.

CHAIRMAN SHEPARD: Thank you very much for attending the meeting and for being with us.

(Whereupon, the meeting was concluded at 3:25 p.m.)



# Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

Nineteenth Meeting March 6, 1984

## VETERANS ADMINISTRATION

ADVISORY COMMITTEE ON HEALTH-RELATED EFFECTS OF HERBICIDES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

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

Tuesday, March 6, 1984

24

25

L L				
2	The meeting of the Advisory Committee was			
3	called to order at 8:30 a.m.			
4	ADVISORY COMMITTEE MEMBERS PRESENT:			
5	BARCLAY SHEPARD, Chairman			
6	GEORGE R. ANDERSON, Member			
7	DQNALD BARNES, Member			
8	THOMAS A. FITZGERALD, Alternate for IRVING B. BRICK			
9	GEORGE T. ESTRY, Member			
10	HUGH WALKUP, Alternate for JON R. FURST			
17	RICHARD A. HODDER, Member			
12	CAROLYN H. LINGEMAN, Member			
13	JOSEPH MULINARE', Member			
14	FREDRICK MULLEN, SR., Member			
15	CHARLES A. THOMPSON, Member			
16	NOEL C. WOOSLEY, Member			
17				
18				
19				
20				
21				

22

# $\underline{\underline{I}} \underline{\underline{N}} \underline{\underline{D}} \underline{\underline{E}} \underline{\underline{X}}$

2		PAGE NO
3	Opening Remarks	_
4	Chairman Barclay M. Shepard, M.D.	1
5	Report on Australian Activities John S. Coombs, QC	6 9
6	John Matthews, M.D.  Agent Orange Registry Statement	19
7	Ranch Hand Study Colonel George D. Lathrop, M.D., Ph.D.	20
8	CDC Epidemiology Study J. David Erickson, D.D.S., Ph.D.	51
9		7.
10	CDC Birth Defects Study Joseph Mulinare, M.D.	63
11	Reports of Subcommittees	•
12	Richard A. Hodder, M.D., M.P.H.  Mr. Fredrick Mullen, Sr.	66 70
اکسر	Mr. Fredrick Mullen, St.	70
13	Comments and Discussion	86
14	Adjournment	119
15	Appendix	
16	Vu-graphs used by Colonel Lathrop	120
17	Minutes of Subcommittee Sessions	
18	Epidemiology/Biostatistics Veterans Education/Information	130 138
19		
20		
21		
22		
23		

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

24

# PROCEEDINGS

DR. SHEPARD: Good morning, ladies and gentlemen. I think we'll get started. We have a full agenda as usual and we're very happy to welcome you to the nineteenth quarterly meeting of the VA's Advisory

Committee on Health-Related Effects of Herbicides.

We're pri-vileged and pleased to have some distinguished guests with us this morning who will be addressing you later on in the program; We would like to acknowledge the presence of Mr. John Coombs and Dr. John Matthews, colleagues from Australia; Colonel George Lathrop who will bring you up to date on the activities of Ranch Hand Study and a number of other distinguished members of the committee. Welcome, one and all.

As is our custom, this meeting is open to the public. We would ask that any, all members of the audience please sign the registry.

As in the past, we will make time on the agenda available for questions from the audience. We would ask that the audience restrict their questions to that question and answer period in order that we can get through our agenda in an orderly fashion. We're sorry to report that we have a resignation from Dr. Frank Cord le who so ably served on our committee.

Dr. Cord le with the Food and Drug Administration, because of the press of other duties, has submitted a resignation and unfortunately will not be able to be with us. We have set a tentative date for our next advisory committee meeting of June fifth.

So if you will make a note of that, that will probably be the date of our next meeting. Just to bring you up to date on some recent activities, I'm sure you're all aware now that on the thirtieth of January the House passed the 'Bill entitled Agent Orange and Atomic Veterans Relief Act which will provide disability and death allowance to veterans and survivors of veterans who served in Southeast Asia during the Vietnam era and suffered from certain diseases.

As you probably also know, this has been passed to the Senate for their consideration. On February the twenty-fourth, the investigators in the Air Force Health Study presented several briefings.

Included in those were a briefing to Congress, a briefing to representatives of service organizations over at the Pentagon and finally a full blown press conference later on in the afternoon also at the Pentagon.

I'm sure that you probably have seen the various

reports in newspapers and the media

В

following that series of briefings. We're happy to announce that a member of our staff, Mrs. Nancy Howard, has been asked to join our VA quality control team in order to assure that we have some on-going process for checking on our procedures for the conduct of the Agent Orange registry examinations and related activities.

So she will be making the first of her visits with our external review program later this month in West Haven. I, myself, will be visiting over the next weeks two areas, Chicago and Denver, and we'll be doing a similar effort, meeting with our environmental physicians in those areas and reviewing the progress of our Agent Orange activities at medical centers in those two areas.

I'll also be going to Boston later on in the month. The GAO review of our Agent Orange activities is an on-going process and we've been having frequent meetings with the auditors at GAO, so we're looking forward to that progress.

During past meetings there has been some concern expressed by some members of the committee as well
individuals
as interested / attending our meetings concerning
our process for keeping our environmental position up to
date in the field and from time to time I have, I hope,

provided assurances that that is a very high priority item and that we are in fact continuing that process. A number of things have gone on and will continue in that regard.

had two major national educational conferences with our environmental physicians and we're planning a third. The date for that's not yet been set. We have bimonthly conference calls to our environmental physicians. Also an extensive mail-out program is on-going, in which we very frequently mail out not only the proceedings of this committee but other informational materials.

So, we do keep in close touch with our environmental physicians.

It's very common for environmental physicians
in the field to call us to ask questions about activities they are
if they have any concerns or problems that / dealing
with. There's a very free communication between our
office and the field.

In addition to that, as I've alluded to, we make site visits to our hospitals

and that helps to keep the lines of communication open. In addition, and you'll be hearing more about this later on in the program, we are in the process of

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Bolt. & Annap. 269-6236

2

3

Δ

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

details of that effort.

Finally, I would like to take this opportunity to go on public record once again to commend the work of our environmental physicians in the field because really they are the ones who keep the program going. / are the ones who really deal with veterans at the local level, I think it's a tremendous effort that they have put forth and in virtually every instance that program has been going well.

I'd like at this time to call on our guests from; Australia to provide a report on the activities of the Royal Commission and I would first introduce Mr. John Coombs, an attorney who serves as the counsel to the Royal Commission investigating the effects of herbicides on Australian veterans and he is accompanied by Dr. John Matthews, an epidemiologist who is working on several studies related to this issue in Australia.

### REPORT ON AUSTRALIAN ACTIVITIES

MR. COOMBS: The concerns and anxieties of American veterans who served in Vietnam are shared by Australian veterans. Those concerns have developed out of the past few years to a point where they are so real and so genuine that they must be addressed at a governmental level.

There have been for years studies in trying to investigate the problems. There was a quite elaborate birth defects study done by an epidemiological team in Australia and there is just coming to conclusion a mortality study and the details of those studies are more properly a matter for Dr. Matthews to describe to you.

The point of the studies did not, it seems, allay the fears of veterans in Australia and in the lead up to the 1983 federal election the Labor Party promised a Royal Commission into the use and effects of chemical agents in Vietnam to put, if you like, an independent and judicial team together to inquire. After March 1983, the Australian Government appointed Mr. Justice Phillip Evert a Royal Commissioner to make such an inquiry.

Royal Commissions are a traditional way of allowing the government to have investigations done at arm's length from the government. The Royal Commissioner

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

\* <sub>2</sub>

as his name suggests is appointed by the Queen's Representative. He inquires independently of the government and if I may say with respect to government, there's a long tradition of Royal Commissions — governments so the general public feel confident when the Royal Commission is appointed that it will diligently, separately and independently inquire into whatever the politically sensitive or difficult problem that needs inquiring into.

Mr. Justice Everts, who is a distinguished federal court judge, he was before that a trial lawyer, a barrister, specializing in about half of his practice anyway into industrial medical and injury problems. So well fitted for the task professionally and also himself an ex-serviceman from World War II.

twice and he understands the way men who fight together live and work. He began last May to put together a team and he paid me the honor of appointing me his lead counsel to conduct the collection, collating and presentation side of a Royal Commission, part of which will be done in a court type context, but most of which will be done in a quiet, scholarly and / kind of way.

We are looking in America at today's studies that are going on here and we hope to be able to give

some kind of definitive report in the form of findings and recommendations towards the end of 1985. It follows from what I've said, I hope, that I would not be prepared at this time to venture any conclusions at all.

We are about a quarter of the way, perhaps, along the track. The Royal Commissioner has not seen all that I have seen and we have formed no decided views at all. It's important that I stress that.

The time in America has been well-spent. We've had opportunities to deal with veterans' organizations. We've had opportunities to deal with the lawyers who are appearing for many veterans in the class action, and we've had opportunity to observe what research is being done on behalf of the Administration and the many independent studies.

And I'd like to take this opportunity to publicly thank Dr. Shepard and Dr. Young and very, very many other people, Dr. Linea, who have made us welcome, given us quite free and open access to all kinds of data which has been extraordinarily usefull. If you think it's appropriate, Dr. Shepard, I'd ask Dr. Matthews to describe the design and the results of the birth defects study and similarly the design of the mortality study which is not yet finished and the morbidity study which we hope

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

В

to do.

It's important to remember that the Australian population was way, way smaller, 50,000, in all fields was all that went to Vietnam from Australia, but there are advantages in that from a study point of view which Dr. Matthews will outline. But perhaps I ought to say that we have in Australia a very homogeneous population. Those who went to Vietnam are easier than a more heterogeneous population to get control groups and the like from.

DR. SHEPARD: Thank you very much. Dr. John Matthews.

DR. MATTHEWS: Thank you. The three studies that are either completed or in train or proposed in Australia are firstly the birth defects study which was initially designed by Dr. McClennan and concluded by Dr. Donovan working with the Australian Veterans Health Study Group in Sidney, Australia and that birth defects study was very simple in concept.

What was done was to look up in hospital records to identify infants with birth defects that were identifiable in the records of the hospital where they were born or in a certain number of cases in birth defects registers and to select a control baby who was not subject

to any birth defects but born, if you like, the next birth in that same hospital.

And the very simple question that was asked was was the birth defect baby more likely to have been fathered by a Vietnam veteran than was the control baby. Now, the answer within the limits of the statistical power of the study was no.

There was no more likelihood of the father being a Vietnam veteran if the baby had a birth defect than not. Now, of course, within some of the subgroups, we presume due to chance, some of the subgroups, some of the particular abnormalities were slightly associated with veteran status, but overall, there was no evidence to suggest any association between birth defects and Vietnam veteran status as the father.

So within the limits of the study design, there was a negative finding there. The other study that is somewhat more straightforward in concept was a mortality study based on the entire cohort of Australian draftees from the Vietnam era.

And this was a study of about 44,000 Australian drafteees. These are genuinely young men whose birthddate came up in the the birthday ballot and they were drafted into the army. Approximately somewhat less than 50

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

percent of those drafted ended up going to Vietnam and the other somewhat more than 50 percent did not go.

And as Mr. Coombs said, the Australian population is homogeneous socially and ethnically and we had a good contrast between those who went and those who didn't go, and very few differences between them when the data are examined retrospectively. Now, that mortality study followup is complete.

At the present time we are not able to say because the analyses are not complete on any differences in mortality between those who went to Vietnam and those who did not go. That report will be available for the Royal Commissioner and for government shortly, but at present time that data, the data is unavailable.

The third study, which is at the design stage is awaiting a decision from the Australian Government whether they wish to proceed with it, is based on the same concept of looking at draftees who went to Vietnam versus the draftees who did not go. In this case, largely for reasons of time and cost, we have selected a subsample of draftees.

These will be draftees who were drafted from one state, New South Wales, the most populous state in Australia and the study center is in that state. Those

draftees who went to Vietnam will be invited for a morbidity examination and, as will a control group of draftee who did not go. Draftees living out of the state will be invited to the study center in Sidney as was done with the Ranch Hand Study. In concept, the design will have many similarities with Ranch Hand and will benefit from the experience of Ranch Hand.

We would hope that with a somewhat larger sample size and with perhaps, again we hope, a higher compliance rate both in the Vietnam and the non-Vietnam group that we will have quite a tight study design, but again, I must emphasize this study proposed to examine 5,000 men, 3,000 who went to Vietnam, 2,000 who did not and to relate within the Vietnam cohort any outcomes which may be observed to probability to exposure of Agent Orange and that study is still on the drawing board waiting for government approval before it goes ahead. Thank you very much.

DR. SHEPARD Thank you very much. Dr. Matthews will be available to meet with the epidemiology biostatistic subcommittee later on in the program. While I'm subcommittee on that point, that committee, the/ on epidemiology and biostatistics will remain in this room.

The subcommittee on information and education

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

will adjourn to the room down the hall for their respective subcommittee meetings.

MR. WALKUP: Excuse me, Dr. Shepard. Since some of us apparently won't be here to be able to hear their responses, would it be possible for us to ask them some questions now or for them to come back this afternoon for us to do some followup on the information they've given us today?

DR. SHEPARD: Yes. If you have questions now, feel free to ask them.

MR. WALKUP: Fine. One is the birth defects study that you were talking about has apparently a couple of subgroups where there was a statistical, statistically significant difference which was found and you said that was probably related to chance. Could you tell us what those subgroups were and the level of the statistical significance?

DR. MATTHEWS: I did comment that I was not directly involved or I meant to comment that I wasn't directly involved with that study and I would not want to comment in this forum without refreshing my mind about the exact details of the findings. But my understanding is that at the subgroup analysis level, once you divide it up and look at different birth defects, that there was

very little evidence that what was found could not be explained by chance.

In other words, if you're talking red pennies, green pennies, blue pennies and brown pennies, then looking at just one color then the chances that you get more heads than tails would be somewhat more greater than chance with one of the colors. Now, I don't want to be pinned down because I would wish to have the data in front of me as I wasn't directly involved in that study myself.

MR. WALKUP: Does the committee have copies of the study available to it?

DR. MATTHEWS: Yes. I think it would be possible for a copy of the study to be found this afternoon. I apologize for not having it with me now.

MR. WALKUP: We appreciate you coming. Perhaps you can't answer this question, either, but in the Ranch Hand Study which we'll be discussing later, apparently there were also some, some areas where there were some indications that there might have been some birth defects associated with Vietnam veterans as opposed to the control fathers. Have you had a chance to look at that information and do any comparisons between what was found in your study and what was found in the Ranch Hand Study?

DR. MATTHEWS: Well, I guess it's more proper

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

ı

20

21

22

23

24

25

studies.

The data need to be interpreted in terms of whether you selected the sample correctly. Of course. that was done very well with Ranch Hand, but the thing you don't have complete control over is who attends and of those who attend, whether they remember and report in

> FREE STATE REPORTING INC. D.C. Area 261-1902 • Balt. & Annap. 269-6236

I think

a comparable fashion. It's those two things that even with the excellent design that Ranch Hand had they didn't get 100 percent attendance in the two groups. Of course you can't be assured that you've got comparable reporting and I would feel that certainly the interpretation that is very plausible is that those minor birth defects might be arising from differential attendance and differential reporting in the two groups.

MR. WALKUP: Thank you very much, Doctor. One other question if I might of Mr. Coombs. Could you review for us one more time the actions that the Australian Government is taking towards veterans who served in Vietnam regarding their concerns about Agent Orange, what sorts of treatment or compensation are available to those veterans pending the outcome of these studies and the Royal Commission?

MR. COOMBS: We have now the equivalent of the bill that's before Congress at the moment. Vietnam veterans are treated exactly as veterans of all wars. There's a special statute that included them in the rehabilitation and repatriation process.

They have, I think it's fair to say, somewhat of an advantage over American veterans in this one limited way, that if an Australian veteran establishes that his

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

g

13

14 15

16

17

18

19

20

21

22

23 24

25

disability that is measurable is connected in a way, that can be described as more than fanciful, to war service, then the onus as it were shifts to the administration to show that it is not connected with war service.

In other words, once there's a connection that can be seen and it's more than just suing, the administration has the onus of disproving it to us.

MR. WALKUP: So in Australia were I to assert that I was exposed to Agent Orange in Vietnam. has a birth defect which in some studies has been shown to be associated with exposure to dioxin or in some --, then the onus there would be on the government to disprove my case until that were disproved and I would receive compensation any my child assistance from the government, is that true?

MR. COOMBS: Well, there isn't a provision at the moment for compensation of the child because the circumstance has never happened before and I know of no legislation in the pipeline to do that. The area I'm talking about is the area where there is a health defect in the veteran himself.

And it's fair to say also that there has been, as I understand it, only one claim specifically based on MR. WALKUP: Thank you very much.

DR. SHEPARD: Are there any other questions from any members of the committee for either Dr. Matthews or Mr. Coombs?

DR. KAHN: I have one. Dr. Matthews, you didn't tell us the overall predictive power in the birth defects study. Do you remember that offhand?

DR. MATTHEWS: Yes. I think the target power was to have about 80 percent power of detecting an increase at risk of 50 percent. Again, I wouldn't like to pinned down without looking at the original document and I apologize but it wasn't a study that I was actually involved in. But my recollection is that the study was designed to have an 80 percent probability of detecting a 50 percent increase in risk in relation to exposure. Now, I prefer not to be quoted on that.

DR. KAHN: I understand.

DR. SHEPARD: Thank you very much. I would like

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

ŧ

to thank the guests from Australia for being with us today. They've had a very busy schedule. It's been a privilege for us to be involved in helping them around a bit.

As you all know, I'm sure, there's a very close relationship between our government and that of the Australians over this issue.

I hope that we all agree that it has been a mutual benefit

to share information and again have an open communication so that all aspects of this whole issue can be viewed from many perspectives, and we can benefit from each other's activity. So we thank you very much for being with us today and wish you well in your on-going visits and on your trip back.

AGENT ORANGE REGISTRY STATEMENT

A couple of other announcements. I'd just like to make, draw to your attention a short document that our office prepared. This has to do with a statement as to the uses and limitations of our Agent Orange registry process.

There's been a good deal of ambiguity about what that effort can and cannot do in the way or providing useful epidemiological information, so I would just call this two page statement to your attention. I think we've got handouts in the outer room for those of you not

on the committee who would like to see this statement. I hope that it puts in perspective the uses of the registry, why we feel it's important to continue the process, but also outline some limitations in terms of its use in epidemiological research.

Also, we have provided for you a handout that I alluded to earlier, concerning the various pieces of information that we have shared with our environmental physicians in our ongoing efforts to keep them abreast of developments. I'd like now to call on Colonel George Lathrop, a principle investigator on the Air Force Health Study, who has been in recent days, briefing various committees and groups. George is indefatigable, and we're very pleased to have him with us this morning to present the results of this important study.

I have handouts here for the members of the committee and there are a few additional copies available for those Who would like to follow along. This is George's presentation. Colonel George Lathrop, United States Air Force.

### RANCH HAND STUDY

COLONEL LATHROP: Good morning, ladies and gentlemen. John Matthews did such an outstanding job of presenting the birth defects section, I believe we should-

# FREE STATE REPORTING INC. Court Reporting • Depositions

UNKNOWN: You don't have a microphone on your podium, sir.

COLONEL LATHROP: Well, we'll have to get one, then. Good morning again. I represent three principal investigators not with me this morning, Lieutenant Colonel Bill Wolfe, Colonel Patricia Moynahan, and Dr. Richard Albanese of our group.

As most of you are very familiar with the background of the Ranch Hand Study, let me present a quick overview of the background of the study and its design. Dr. Shepard does have copies of this briefing and has brought additional copies of the report for those of you that wish one.

(Vu-graphs being shown) - See pages 120-129

COLONEL LATHROP: The Ranch Hand Study is

White House directed and has been reaffirmed now by two
separate administrations. The study protocol has been
reviewed extensively and, as a matter of fact, five times
since its inception.

The Ranch Handers comprise a very unique, study population as they were unequivocally exposed to herbicide. As a matter of fact, approximately 1000 times more than that of the average ground troop. The study design itself calls for three separate elements, a mortality

study, the first report of which was released on 30 June 1983, the second study, a morbidity study or study of disease that's the subject of this particular overview.

The morbidity study is composed of questionnaires and physical examinations keyed to the known
reported dioxin effects as well as to veteran complaints.
The morbidity effort has been conducted by contract by
two nationally recognized organizations, Lou Harris of
New York and the Relsey-Seybold Clinic of Houston, Texas.

The third element of the design is that of followup and we intend annual mortality updates for the next twenty years and a repeat of questionnaires and repeat physical examinations in years 3, 5, 10, 15 and 20 following the baseline effort. The major findings in terms of the proposed clinical end points for dioxin were the absence of cases of soft tissue sarcoma, porphyria cutanea tarda and chloracne in the Ranch Hand group.

We did find one case of soft tissue sarcoma in a comparison member. In the fertility/reproductive area, no significant Ranch Hand findings were noted for sperm count or percent defective sperm. Perhaps of some interest to the elderly gentlemen here is that we detected an increasing sperm count with age.

The bad news is that compliance to that

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

particular specimen also decreased with age. In terms of fertility and infertility, there were five separate measures and they were all essentially negative.

In addition, miscarriage, still birth and live birth rates showed no differences between the Ranch Hand and comparison group. It's emphasized that for severe birth defects and moderate birth defects, there were no significant differences.

Most of the findings in the fertility area are based at this time upon unvalidated self-reports. Small numbers are involved and most fertility/reproductive findings are deemed preliminary at this time as they await verification by birth certificate and medical record reviews.

There is a clinically non-relevant aberration for limited or minor birth defects that has unfortunately skewed the overall findings to statistical significance. This fluke is not judged to be of clinical significance and let me illustrate these points both for birth defects of and for neonatal deaths with the next couple/slides.

When we make a distribution severe, moderate

and limited birth defects, this is the kind of distribucategorizing for service before
tion that appears when/ Vietnam and after Vietnam. The
definition of a severe birth defect is one that is life

threatening or produces/major handicap throughout life.

The definition of a moderate birth defect is one that requires constant medical care throughout the individual's life. A limited birth defect is defined as a birth defect requiring absolutely no medical care whatsoever.

As you can see, before Vietnam, the distributions were reasonably similar. After Vietnam they are essentially identical within the distributions: for moderate birth defects, very similar; after Vietnam, a slight shortage in the Ranch Hand group. But the great disparity lies with the limited

and birth defects, only 8 percent before Vietnam, / 32 percent after Vietnam. It's this aberration that throws things into statistical significance.

Now, one might argue that distributional difference is not the true case and one ought to look at attack rates. Indeed, the attack rates by the birth defect categories shows identical findings.

With regard to neonatal deaths, the findings were of exceptional interest, but again, we're into the low number category. We have taken these low numbers and adjusted them to rates per thousand. As you can see, before Vietnam and after Vietnam the rates of 13.4 and

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

16.8 are remarkably similar. In addition, that's remarkably similar to the pre-Vietnam comparison rate of 16.0 per thousand. Now, there are no statistical differences with respect to those three rates. However, all three rates significantly differ from the 3.4 and that suggests the possibility of under-reporting in the comparison group post-Viet nam.

Again, it's emphasized that these data are subjective self-reports, mostly by the wives, that have not as yet been validated by birth certificate or medical record review. Further, please recognize the difference between a stillbirth and a neonatal death is one second of life and that there is a natural stigma attached to the label of stillbirth.

Also, the difference between an infant death and a neonatal death is one day of life. Thus the subjective reports are critically dependent upon exact times of death and we regard this as an issue most likely to be repressed by parents.

Thus, there is substantial reason to believe that some of these reported deaths are misclassified. In view of these real concerns of the validity of the self-reports, the statistically significant finding of an excess of neonatal deaths in the Ranch Handers is not

viewed with alarm or even as a solid finding at this time.

For cancer there is no significant difference occurrence in the / of systemic cancer, that is, non-skin cancer. The Ranch Handers are not developing unusual cancers in unusual sites nor are they developing cancer at a younger age.

No soft tissue sarcoma was found in the Ranch Hand group. However, we found significantly more skin cancer in the Ranch Hand group but it was not possible to adjust for sun exposure, the primary cause of these tumors.

Most of the skin cancers were of the nonmelanotic variety and mostly of the basal cell type, a
very innocuous form of cancer that is easily cured by
surgical excision. Many of us here today, including
myself, have one or more of these cancers right now and
particularly those of us from the south who enjoy the
out-of-doors or high altitude recreational sports.

The observation of an excess of basal cell tumors in the Ranch Hand group is not viewed in an alarming way since this happenstance must be adjusted for sun exposure, a process that will hopefully be accomplished sometime this year. Here are the rates for skin

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

cancer using two separate comparison groups versus the Ranch Hand group and then a breakout of all the systemic cancers.

As you can see on the bottom, there are no significant differences. The percentages are very, very similar. There are some small aberrations that you will notice because we're dealing with small numbers, digestive system 0 versus 5, -- genitourinary differences. These differences again are reflective of small numbers and they are not statistically significant.

UNKNOWN: Could you explain the difference between the two comparison groups --?

COLONEL LATHROP: The original comparison individuals group was those initially identified before we discovered that there was an over-selection error. All those that followed thereafter within the study were labeled and flagged in a special way to avoid possible bias or mis-representation within the analysis.

So several of the chapters within our report the used original comparisons, others used all comparisons. Essentially all the inferences made within the report are based upon the original comparison group.

With respect to liver findings, the Ranch
Handers self-reported more liver and porphyria cutanea

tarda - like symptoms. These reports, however, have not been verified as yet by medical records reviews.

The symptoms were not confirmed at the physical examination. In fact, no cases were diagnosed, nor were the symptoms validated by three separate laboratory tests. Numerous minor laboratory differences were noted. Let me add that numerous minor differences have been detected in the study, as expected, that are statistically significant, but of absolutely no clinical relevance.

The liver tests fall into this category. Any other interpretation is simply over-reading of the data. The findings were reported for the sake of completeness and as a possible guide to other researchers. More verified miscellaneous disorders were in fact reported in the Ranch Hand group. We're not clear as to the significance of this,

but I can assure you that in a military population, the diagnosis of a non-specific liver disease is often a mask that for alcoholic cirrhosis as / label in a military population would essentially be career damaging.

Several We're in the process of planning / case control studies to find out if in fact that's what happened.

The psychologic tests for the Ranch Hand study were exhaustive. They lasted six and three quarter hours,

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

consumed essentially one day, were composed of six validated test batteries. For the more objective tests, that is, I.Q. Halstead-Reitan Performance tests, there were absolutely no differences with respect to the Ranch Hand and comparison group.

However, for the more subjective psychologic tests, as expected, the analyses reflected the substantial effect of the educational level on the test results. In particular, questionnaire administered by Lou Harris, the Cornell Index and the MMPI showed substantial Ranch Hand differences with respect to a variety of deficits.

Some of these parameters included fear, anger, fatigue, depression, hypochondria, mania, hypomania, et in the cetera, again, all of them/high school educated Ranch Handers. Only the parameter of isolation was noted to be significant within the college-educated group.

We view that the psychologic findings are of genuine interest, but again, because of the highly subjective nature, additional verification measures are indicated and full consideration of the Post-Vietnam Stress Syndrome must be accomplished. In terms of other observations, there was a poorer perception of overall general health by the Ranch Handers as determined by questionaire.

Two leg pulses were diminished in the Ranch Handers. The significance of this is absolutely unclear at this time, but since there was no correlation between the central cardiovascular findings, that is blood pressure, heart rates, heart abnormalities, we do not

to be a sign of early heart disease or atherosclerosis at this time.

interpret the pulse deficits

Clearly, for the followup examination, a more detailed Doppler-type measurement will be conducted. There were essentially no differences with regard to the nervous or system, renal system, immune system, blood system. Although there were small test differences, they were not judged to be of clinical relevance.

No meaningful relationships between exposure and the dependent variables in this study were noted and that's a major finding in this study. The effects of classical risk factors such as age, smoking, alcohol, educational level, maternal age, paternal age -- were observed essentially throughout the study.

Repeated demonstration of these classical risk factors lend great credence to the overall validity of the study. In conclusion, we believe that this study measured the true health status of the study population and its

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt, & Annop. 269-6236

comparison population to the maximum extent possible.

All significant findings both positive and negative are being followed up at this time, that is a collection of appropriate records to confirm or reject the subjective findings plus detailed planning for the next examination. There is at this time insufficient evidence to support a herbicide causality.

In total, we believe that these findings should have be viewed as reassuring to the Ranch Hand group. I taken some reasonable heat on that phrase in the last week or so. I would like to reemphasize it. That scientific report is approximately 350 pages in length. There has got to be some way of summarizing that with the population that the Air Force serves, the Ranch Handers. The very fact that we did not find any of the major proposed end points, the very fact that they appear to be in remarkably good health for their age to us is reassuring.

These people have been bombarded with a media blitz since the day they flew those missions in Vietnam.

That's continued throughout the entire controversy to this day. We look at the Ranch Hand population in a very simple way. If there are adverse health findings, clearly

they deserve to know those. Likewise, if there is an absence of findings, they deserve the peace of mind that goes with that. We feel that the word "reassuring" is totally appropriate for the Ranch Hand group. That concludes my briefing, Mr. Chairman. At this time I will entertain some questions.

DR. SHEPARD: Thank you very much, Dr. Lathrop, that was excellent. Are there any questions from members of the committee? Dr. Lingeman?

DR. LINGEMAN: Colonel Lathrop, I'd like to congratulate you on a fine presentation. Concerning the questions I had planned to ask, most were already answered. However, I have two questions. One is that you noted that there were six genitourinary cancers among the Ranch Handers and two among the controls.

COLONEL LATHROP: In the originals.

DR. LINGEMAN: Yes. Can you tell me what the types were, where were they located, in the kidney, bladder or elsewhere?

COLONEL LATHROP: We had if I recall correctly and I would have to go back to the original report, somewhere on the order of three bladder cancers in the Ranch Hand group and two in the comparison group. We looked at

body?

COLONEL LATHROP: No. These were head and neck basal cell carcinomas for the most part. Pathologic review has not been conducted. Of the fourteen biopsies taken from eleven patients at the physical examination, no chloracne was diagnosed, but we really were after basal cell carcinomas. Most of those were diagnosed on a clinical basis or by verified medical records.

Were these
DR. LINGEMAN: histologically
verified?

COLONEL LATHROP: Yes, but not by this particular study. They were simply excised and removed by other medical facilities and we verified that fact by the review of medical records. We're in the process of trying to get our hands on those slides.

DR. LINGEMAN: Thank you.

DR. SHEPARD: Any other questions by members of the committee? Hugh?

MR. WALKUP: Colonel, I think we do appreciate your reassurances. The one thing that I know some concern exists among the veterans' community around is normally when we've heard results of studies such as this we've heard of not so much the reassurances as the needs for further research in particular areas, and we're hearing

this presented in a different format this time. Could you give us that statement in the format of what you found that indicates the need for further research?

colonel Lathrop: Well, there are major differences with respect to these two groups. That is, we found an aggregation of many differences, mostly in the subjective areas. It's problematic at this point whether those subjective differences are reflective of true disease or whether they're due to differential reportings, perhaps based upon media bias.

Very clearly they need adequate and proper followup. To us the findings to date simply reaffirm the fact that the study protocol is on target and should be the followed. We would think it incredibly remiss for/government to drop the study at this point simply because we didn't find tremendously alarming things.

What we have simply done by virtue of the mortality report and baseline morbidity report is show that there have been no major problems in the past nor can we find major problems at the present. It does not preclude these conditions emerging in the future.

We clearly believe this to be the most heavily exposed military population that served in Vietnam.

There are a variety of reasons why one might postulate

that some of the proposed end points would not yet be apparent because of latency issues and would take a few more years to develop.

If the protocol was followed properly, we have the opportunity of bracketing that time period to indeed determine whether those aberrant effects will emerge. So we feel that the Ranch Hand study is viable and should be continued.

MR. WALKUP: Are there specific areas, Colonel, that the Air Force is intending to conduct further research on as a result of this report outside of the original protocol?

of the original protocol, but please recall that that document says that we will use the baseline physical examination and all subsequent examinations as a mechanism for fine tuning each and every examination. A good example of this is, how do we explain the pulses.

We really don't know. But clearly there are better measurement techniques involved than simply putting your hand on a pulse and we're going to in fact validate whether the pulse measurements are a real finding or an aberration found at baseline. So there's a lot of things to followup and do -- with.

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

3

5

6

7

8

Q

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. WALKUP: One final question, Colonel. On the liver cancers, you had mentioned that those might be alcohol related.

COLONEL LATHROP: I didn't say liver cancers. Those are liver disorders.

MR. WALKUP: Pardon me. And then later -COLONEL LATHROP: Liver cancer would be a very startling finding and would be an alarming finding, believe me.

MR. WALKUP: Then later you indicated that the effects of possible risk factors including alcohol were observed throughout the study.

COLONEL LATHROP: Yes.

MR. WALKUP: Did you not do some investigation into the relationship between the alcohol factors that you identified at that point and liver disorders that you referred to earlier and was there any relationship between those?

COLONEL LATHROP: That's an area within the report that we need to shore up more than we did. there are some adjustments or risk factor analyses that need to be done. Those are in progress right now to further explore the relationship between alcohol and the liver findings.

DR. SHEPARD: Any other questions from members?
Yes, Dr. Anderson?

DR. ANDERSON: The question always arises as to whether or not there's residual dioxin in fatty tissues, adipose tissues. Do you have any plans in the future of any fat biopsy work?

COLONEL LATHROP: When someone can give me a femptogram sensitivity test, that is,  $10^{-15}$ , I will certainly consider it. My personal view is that we do not have adequate test sensitivity at this point. You're talking  $10^{-12}$ , clearly which will not be adequate to draw out sufficient levels for anyone to make valid inferences in my judgement.

I will also point out, however, that we have prepared for this eventuality and have saved a variety of urine, blood and semen specimens on all these individuals and have frozen them at -70 degrees. If and when a test system is developed that has sufficient sensitivity, we will be able to haul them out and test them appropriately for dioxin.

My personal concern is that we've gone through a minimum of twenty half lives since the time of Vietnam and how can one really ascribe any positive finding to the Vietnam experience versus the dioxin that one has

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

2	inherently picked from the environment.
3	DR. ANDERSON: Thank you.
4	DR. SHEPARD: Any other questions from members
5	of the committee? Okay. If not, I'd like now to -
6	MR. MILFORD: Can we have questions from the
7	audience?
8	DR. SHEPARD: All right. We will waive our rule
9	since Dr. Lathrop is extremely busy and will not be able
10	to stay for the wrap-up session at the end so we'll
11	entertain a couple of questions from the floor.
12	MR. MILFORD: During the press conference -
13	DR. SHEPARD: Will you please identify yourself?
14	MR. MILFORD: Sure. My name is Lewis Milford.
15	Law Center. I'm with the National Veterans During the press
16	Air Force conference and the disclosure of the test results, there
17	seemed to be some disagreement between the civilian and
18	the military investigators about the characterization of
19	the study as reassuring. One question is; was there such
20	a disagreement about the use of the word reassuring to
21	charcterize the study and if there was, could you explain
22	the points of disagreement and the conclusions you reached?
23	COLONEL LATHROP: I personally don't view that
24	there was any disagreement whatsoever among the princip al
25	investigators. The briefings that were prepared have

total agreement and consensus among the four of us.

The report was obviously released over four signatures. I don't view that there was any substantial disagreement and that should speak for itself.

MR. MILFORD: There was, if I recall at the press conference, one of the civilian investigators who seemed to have some serious concerns about using that word "reassuring." That was made very clear during the presentation. Was that not resolved before or was that of something that you simply don't see as an area/controversy?

COLONEL LATHROP: I don't view that as an area of controversy whatsoever. I think that has been tremendously misrepresented by the press.

MR. MILFORD: In what sense?

COLONEL LATHROP: In the fact that it's been over-dwelled upon in several news presentations. I do not view that there is any significant essential disagreement among the four investigators, period.

DR. SHEPARD: Yes, Peter?

DR. KAHN: I didn't realize he wouldn't be here this afternoon. How many soft tissue sarcomas would you have expected based on standard national numbers in a group that size?

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

COLONEL LATHROP: Using national numbers, we would expect to see one soft tissue sarcoma over the next fifteen years. The fact that we've already observed one -

DR. KAHN: The fact that you've found it --.

colonel Lathrop: No, statistical power is only one side of the coin. I think people have a tendency to over emphasize this. The very fact that you have not seen a case is significant in and of itself and a good back—

is that ground for this/the Dow and Monsanto studies with very, very small sample sizes have shown four, I think it may be up to five or six cases of soft tissue sarcoma.

We've not seen any in the Ranch Handers. The very fact that we do not see chloracne in the Ranch Handsarcoma ers and we've not seen soft tissue/suggests to us that the Ranch Handers, while heavily exposed, these and the other military personnel were not as heavily exposed as the industrial chemical workers in this country.

And that in itself should be reassuring to the Ranch Handers. So what I'm saying is, we appear to be seeing disease coming out of the industrial populations and thus far we're not seeing it coming out of the military populations.

DR. SHEPARD: In the back of the room, yes?

MR. MARTIN: Dave Martin, Vietnam Combat

Veterans Coalition. I'm an infantry combat Vietnam

veteran. I have one question about the word exposed,

Doctor. What do you mean by exposed? Do you mean hours,

do you mean amount times hours, you know, what's your

exposure index? How do you determine that?

COLONEL LATHROP: Our exposure index within the Ranch Hand study is based upon the average number of gallons that an individual handled during his tour in Vietnam and also considers the average TCDD content of the particular herbicide. Unfortunately, this is a theater specific herbicide index and we've not yet been able to translate this to an individual specific herbicide exposure index. We have experimental studies with C-123

aircraft at Eglin Air Force Base in progress at this time.

We feel by this time next year we'll be able totally to

refine our exposure index.

DR. SHEPARD: Yes?

MR. FALK: Yes, I'm Allen Falk. I'm chairman of the New Jersey Agent Orange Commission and my question was very much along the lines of Mr. Martin's. One of the problems we have in explaining the Ranch Hand findings to the larger ground population is the assumption on the one hand these studies feel that these are the most

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23.

24

25

COLONEL LATHROP: I think you ought to talk to some Ranch Handers. They would convince you far better than I. These people crawled inside the herbicide tanks, 1,000 gallon tanks and cleaned them. Every time they changed herbicides they had to clean out the tanks.

The crew mechanics as they walked around the aircraft were exposed to the dripping flight booms on both wings. These people did not wear shirts. They wore khaki pants. If you'd see some of the films that Dr. Young has, these folks were loading the herbicide onto the 123 aircraft with hoses breaking and spraying about them.

These people were drenched in it. The question that always arises is how were our pilots exposed because they obviously didn't maintain the aircraft. We've done

experimental studies within these aircraft to show that as they were sitting in the cockpit with their windows open, they were significantly exposed.

is that it was hot in Vietnam and secondly when bullets came whizzing through that plane they would rather catch one without having the glass shatter all over them. So they flew with the cockpit windows open. This created a venturi tube action within the fuselage of the aircraft that drew the herbicide vapors from the back of the aircraft up front and out the cockpit windows. These pilots oftentimes got out of the aircraft with their flight suits dripping.

Now, recall the Canadian aircraft that caught on fire just a month or so ago and recall the commentator's descriptions of how that fire moved from the back of the aircraft straight forward. This is precisely the draft current that is created in an aircraft; it goes from back to front and this is how our pilots became exposed.

MR. FALK: But were there regulations that COLONEL LATHROP: No, there were no regulations.

MR. FALK: As far as gallons?

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

R

innocuous substance. There are memoranda in existance that clearly show no precautions were felt necessary at that time. It was an innocuous substance. These folks were heavily, massively exposed to that compound, not to the degree that the chemical workers were, however.

DR. SHEPARD: One more question. Yes?

MR. WILLIAMS: Dr. Shepard, my name is Mark

Chaplain of the American Legion Post
Outreach
512 in South Jersey. I'm also the / coordinator for the

New Jersey Agent Orange Commission. I have two questions
for you, sir. One is, I understand you talked about peer
review of the Ranch Hand study. I believe from what I've
read that the Ranch Hand study is an excellent study, no
question in my mind about that. I think we're looking at
the wrong group, however.

COLONEL LATHROP: I will debate that with you substantially.

MR. WILLIAMS: And I'm sure you'd win the debate.

I have others that would debate you -

COLONEL LATHROP: My counsel to all of you who would doubt the Ranch Hand exposure is please talk to these gentlemen. You can talk to me all day long and may not believe me, but talk to the Ranch Handers.

3

۳

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. WILLIAMS: Colonel, I have had calls from anonymous colonels in the Air Force in McGuire Air Force Base who have given me information that they would not give me their names so let's not talk about -

COLONEL LATHROP: There is no such thing as an anonymous colonel.

MR. WILLIAMS: American Legion, as a member of that organization, I understand they viewed hundreds of thousands of feet of the actual Ranch Hand spraying operation and noted somewhat to the contrary that you mentioned before that most pilots and navigators, flight crew to be separated from that, but those on the flight deck were actually going on board and coming off these planes not such as drenched as what we were led to believe. I would have to understand that the people who actually reviewed that at the American Legion would be more knowledgeable than I and possibly they're--. the second thing is, what did the National Academy of Sciences and other organizations say about the Ranch Hand study? Wasn't there some kind of dissention among some other professionals that it was not as good a study as we may be led to believe?

COLONEL LATHROP: I think the National Academy, the National Research Council of the National Academy

previously published its viewpoint on the Ranch Hand study design. You're certainly welcome to ask those individuals for a copy of that. There was a minority report, however, that also

should be read with the same vigor which the main report is read. The primary objection centered about the fact that the Air Force was conducting this study and its primary recommendation was that the study be contracted out. Indeed, as you have just seen, we followed that recommendation to the letter.

MR. WILLIAMS: So there was some dissension about the Ranch Hand study protocol from some scientific group?

colonel LATHROP: The National Academy focused on statistical study power of the mortality study which in our judgment is an incredibly small point to dwell upon. We clearly recognized and even heralded within the protocol that we have suboptimal statistical power for mortality.

We did, however, have excellent, absolutely excellent statistical power in the morbidity study that we've just reviewed now.

MR. WILLIAMS: And your comment about the American Legion reviewing the film, were you aware of this

and has anybody contacted the -

COLONEL LATHROP: My comment to you sir, is again, talk to the bulk of the Ranch Handers. Clearly on many missions when they did not take hits, where the tanks did not leak and when the hoses did not rupture, I'm sure their exposure was minimal.

However, to this day you can go to Wright Patterson Air Force Base and find a 123 aircraft by the name of Patches, the most wounded aircraft I believe ever to have flown; walk inside that aircraft and you will smell the Herbicide Orange to this day. There is no way of getting those vapors out of the aircraft. So in a vapor sense, people are exposed when they're in the aircraft even though they're not being hosed down.

MR. WILLIAMS: Those on Operation Mule Train, did they have anything to do with the Ranch Handers?

COLONEL LATHROP: I'm not familiar with that.

DR. SHEPARD: Dr. FitzGerald, you have a comment?

DR. FITZGERALD: Yes. I'd like to ask the gentleman where he's referring to the American Legion making this review of the film?

MR. WILLIAMS: I have been told that the American Legion reviewed film here in Washington of pilots,

15

14

16

17 18

19

20

21 22

23

24

25

flight crews, navigators and handlers going in and out of the aircraft and apparently hundreds of thousands of feet of this film looking at the individuals and I don't know if it was taken by the Air Force or some group and their comment as I have heard and seen in print was that many of the people on the flight deck when they went in came out the same way, they were not as Dr. Young alluded to yesterday, if there's a burst valve in the back or if they take a round and there's some spray going up in the plane, it will go through in this total effect, but that didn't happen very often.

Again, talk to some Ranch COLONEL LATHROP: Handers with a different point of view.

DR. FITZGERALD: I'd just like to say that, you know, I represent the National Office of the American Legion and I'm unaware of this.

MR. WILLIAMS: You have not seen this?

DR. FITZGERALD: That's right, sir.

MR. WILLIAMS: And what is your position there because I would like to find out who has given me this information?

DR. FITZGERALD: I would be glad to research it for you if you will give me some information on that.

> And your name, sir? MR. WILLIAMS:

DR. FITZ GERALD: Dr. Thomas FitzGerald.

DR. SHEPARD: All right. One more. This is the last one because we must move on.

MR. FEINSILBER: Colonel, have you discussed the possible effects on your findings of the fact that 13 percent of the Ranch Handers chose not to participate in your study?

COLONEL LATHROP: The study participation in the Ranch Hand study is one of the highest ever observed in a national health study—like this. Participation was just phenomenal. We hope to drive it up even higher next time. Approximately 95 percent of all individuals made the commitment to us as they exited the Kelsey-Seybold Clinic to participate in the next round of examinations.

We believe that the 13 percent that you're talking about are mostly those that were discontented with the military or separated individuals; and probably the most likely explanation, are still on active duty, actively participating in flying duties. We know as a matter of fact 14 percent of both of our groups are still actively flying either military aircraft or commercial aircraft. Pilots notoriously do not like to be examined

in the event that a minor defect is disclosed that could

conceivably compromise their occupation. Our personal guess is, and we did not fully analyze this, that the majority of our non-compliants were pilots.

However, I can point out to you that during the time that we did the examination that a number of Branif pilots had joined the study.

DR. SHEPARD: Thank you very much. I'd like to move on now and call on Dr. David Erickson from CDC to give us an update on the status of the epidemiological study. Dr. Erickson.

## CDC EPIDEMIOLOGY STUDY

DR. ERICKSON: Thank you, Dr. Shepard and good morning to some people I haven't seen for a year or so.

CDC at the moment has four components to its efforts in studying the health of Vietnam veterans and I would like to make clear that CDC, while it has some responsibilities for reporting to the VA on these matters, is operating as an independent agency.

The VA has no control over the design, the conduct or the analysis of our study data. The four components of our effort are first a birth defects study which has been ongoing for some time now and which is winding down and a brief description of our progress on that study will be given by Dr. Mulinare shortly.

The other three components of our efforts are the following: first, what we are calling an Agent Orange Cohort study; second, what we call a Vietnam Experience Cohort study, and lastly a what we are calling a Special Cancers Case Control study. The two cohort studies and the cancer study are, I would say at the moment, just getting underway.

We completed draft protocols for these three studies last May. They underwent a fairly extensive peer review process during the summer. There were four independent scientific reviews, one by an ad hoc committee of CDC epidemiologists who work in the program areas outside of our own. The Office of Technology Assessment scientific review was done in the summer.

A special meeting of the scientific oversight committee which was assembled for the Ranch Hand study also reviewed our study protocol and lastly, the Science Panel of the Agent Orange Working Group, interagency working group, reviewed our study protocols. Moreover, we solicited the opinions of some fifteen veterans' groups, representative of national veterans groups for comment on our protocol.

Those reviews were completed in September, and we made a revision of our protocol which we believe takes

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Bolt. & Annap. 269-6236

First, it will look much like the Ranch Hand study. There will be a mortality phase, mortality follow-up phase for all individuals included in the two cohort studies. There will be an interview phase and that will be done, the interview will be done with approximately 18,000 men who are a part of the Agent Orange study, 12,000 men who are a part of the Vietnam Experience study.

Then there will be an examination phase on a subset of those 30,000 men. In total we project that we will have a two to three day examination done in a central location on 10,000.

Finally, the Special Cancer study will be a case control study. It will depend upon the cooperation of a variety of cancer registries around the country. We are hopeful that we will include roughly 400 cases of soft tissue sarcoma, 1300 cases of lymphoma and roughly 200 cases of primary liver cancer and 200 or nasal and nasal pharyngeal cancers.

The sarcoma and lymphoma part of that case control study were what was recommended by CDC in its draft protocol. The primary liver cancer and the nasal

1.3

and nasal pharyngeal cancer are the cancers which were added to our protocol as a result of the review.

and certain laboratory capabilities and infectious disease clinical expertise. It's pretty short on expertise in a lot of the areas which are important to these studies and therefore we have made liberal use of consultants to advise us particularly in four areas about what kinds of things we have to do.

Those four areas are neurology, psychology,

immunology and hepatic diseases. In each of those areas
roughly
we have hired four to five top national consultants
to provide advice as to our specific directions in those
areas.

An important issue in our mind is the fact that we have obtained I believe it's called a certificate of confidentiality which allows us to promise men who participate in these studies that we will keep the data which they provide to us under absolute confidentiality. This goes quite a step further than the usual provisions for privacy which are given under the Privacy Act of 1974.

Indeed, it goes so far that data which will be given by the participants will not be available even to surviving next of kin after the death of the participant.

We are in the process now of reviewing proposals from potential contractors for the interview phase of our cohort studies.

We expect that hopefully that a contract will be let in August this year, somewhere around that time, and that pilot study interviews and main study interviews will begin relatively promptly after that date. We are about to release an RFP for our examination phases and the letting of the contract, performance of the examinations will follow roughly six months after the interview contract is let.

mention. As a part of our birth defects study, every woman who was interviewed as a part of that study, some 8,000 in all, were questioned about whether they had ever been in Vietnam for any reason, any particular way that they had served in the military there. The two cohort studies and the Special Cancer study which we are undertaking now specifically exclude women.

We specifically excluded them for a variety of reasons which I'd be glad to go into in a later session.

Basically we felt that if women veterans should be studied, they should be studied in

numbers sufficient that inferences could be drawn about
women and that our other plans which are designed to
provide the best answer for ground troops serving in Vietnam
would not provide us with very many women.

At the moment we are investigating the feasibility of doing a study of women and expect to make some recommendations on that issue this spring. Thank you.

DR. SHEPARD: Thank you very much, Dr. Erickson.

One question occurred to me, it may have to other members of the committee. You described very nicely the two cohort phases. Is it your plan to award the contract for the examination and the questionnaire process to one contractor, or will there be separate contracts for the two phases?

DR. ERICKSON: We anticipate that there will be a single contractor to perform interviews for both of the cohort studies. We are uncertain at the moment whether there will be one or multiple contracts with which to perform the examinations for both of those studies.

If there are multiple examination contractors, they almost certainly will not be split up on study lines. The reason that we are uncertain about the number of contractors for the examination phase is we are uncertain whether anybody out there in the private sector

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

will have the capability of giving us the throughput that we need to maintain the schedule that we have set up for ourselves.

Finally, there will be many other contracts so there will be contracts, independent contracts signed with each of the cancer registries which agree to participate in the Special Cancer study. There will be a contract in effect with the private sector firm to obtain controls for that study.

In other words, the cases will come from multiple registries around the country. The controls will be gathered from those same geographic areas but by a central contractor and lastly, there will be four contracts for that study for pathology review.

There will be an independent review of pathologic materials from the cases of the four different types of cancer. There will be specialists in liver cancer. There will be specialists in sarcoma and so on:

DR. SHEPARD: Thank you. Any questions from other members of the committee? Dr. Erickson informs me that he also will not be able to be here for the wrap up session, so I would again waive our usual rules and take questions from the floor at this time. Would you please identify yourselves for the purposes of the Recorder? Yes?

MR. FALK: Allen Falk of the Agent Orange Commission in New Jersey. The specs for the interview phase of the cohort study, is that for personal interviews or telephone interviews?

DR. ERICKSON: It will most likely be done over the telephone. Now, there are some unknowns in the equation here. Our preference will be to do them all over the telephone. If our pilot study suggests that we are unable to get sufficient participation or that there are other problems that arise from doing interviews over the phone, then we may have to shift gears.

MR. FALK: Our experience is that there is great reluctance for some of the personal questions that are part of these studies to be answered over the phone.

DR. ERICKSON: Yes. Well, as Dr. Mulinare can tell you, we've had extremely good luck in talking with veterans and non-veterans in our birth defects study on very personal matters and that's been CDC's experience generally. But if, as I say, if we do run into problems in the pilot study, that's the purpose of the pilot study, we may well have to shift gears.

MR. FALK: I'd just ask how long you propose the telephone interviews will be?

DR. ERICKSON: No more than an hour. That's, in

our experience that's pretty long but we find that if there is a personal interest on the part of the individual that they will persist and stick with you. Yes, sir?

DR. LAMM: Dr. Lamm, consultant in epidemiology and occupational health. Two questions. First question, would you define what the entry criteria are for admission to the Agent Orange Cohort and the Vietnam Experience Cohort?

DR. ERICKSON: Entry criteria for the Vietnam

Experience study is relatively simple and straight forward. These will be men who served in Vietnam or the

United States or Korea or Germany during the late sixties
and very early seventies whose rank at discharge was not
higher than E-5, who were in the Army. I think that
about covers it.

For the Agent Orange study, we are still in the process of working with the Agent Orange Task Force, providing much help on matters of selecting individuals for the study. We're firming up the criteria for the choice of individuals for the Agent Orange study.

I can only give you the criteria in sort of broad outline. We will take all units, combat units which served in / in '67 and '68. The daily records of each of those units will be reviewed and locations of the

units recorded.

After all of that is done, we will match the locations of the units on a daily basis with the locations of Ranch Hand and other herbicide applications.

Then those units which have the highest number of encounters insofar as the records available today can tell us will be part of the possibly exposed or probably exposed group and those units which have the lowest numbers of encounters according to the records today will serve as the cohort at the other end of the exposure scale.

Finally, a third cohort will be chosen from an area in Vietnam where there is arguably evidence that no herbicides were used whatsoever.

DR. LAMM: So you will have three subcohorts in the Agent Orange -

DR. ERICKSON: Right.

DR. LAMM: With approximately 6,000 interviewees per and basically a high, low and none?

DR. ERICKSON: Right.

DR. LAMM: With respect to your case control study, do I understand that the controls will be non-cancer controls rather than using other cancer controls?

DR. ERICKSON: They will be non-cancer controls.

In the process of our peer, of the peer review of our protocol, there were people who suggested that we ought to use, quote, diseased, unquote, controls. And we were willing to go along with that suggestion but we wanted some advice as to just what kind of diseases would be eligible for the control group.

And I guess I can summarize it by saying the people, peer who made the suggestion could not come up with suggestions for what type of valid disease control would be, and so we're back with dealing only with normal controls, non-cancer.

DR. LAMM: What information will be acquired

-- control? Will it be a record review with respect to

the case? Will there be interviews? Will the work

histories be obtained and will -- a position that in

cases where you are dealing with relatives and kin of

deceased and in the controls you'll be dealing with living

people?

DR. ERICKSON: Interviews will be done. There will be some record review, of course and confirmation of

the histopathologic diagnosis. But the major data gathering will be as a part of an interview and that interview will go over the occupational history and so on.

Our specifications will require rapid reporting by the cancer registry so that we don't anticipate having deceased cases will be a particular problem except for the liver cancers. And our plans at the moment are that for liver cancer and for other deceased cases that next of kin will be interviewed in abbreviated form, not as detailed as living cases and that next of kin of controls identified by the random digit dialing method will be interviewed in a proportion similar to the proportion of the cases which are deceased.

DR. LAMM: So the cases are then prospectively registered rather than retrospectively -

DR. ERICKSON: Summer '84 on.

DR. SHEPARD: I think in the interest of time we better move along. Dr. Erickson and Dr. Mulinare will be here for the Science subcommittee, so those of you who have additional questions, perhaps you can be part of that committee meeting. I'd like to now call on Dr. Joseph Mulinare who, to give us an update, you can stay where you are, Joe, on the status of the birth defect

g

study.

### CDC BIRTH DEFECTS STUDY

DR. MULINARE: Thank you, Dr. Shepard.

In a word the birth defects study is in its analysis stage, but I thought I'd just spend a minute and give a brief outline of what we've done up to date for those people who haven't been aware of what's been going on with the study.

We began this study three years ago and the interviewing for this case control study started in the spring of 1982.

The interviewing of the case controls, interviewing of parents of children who had birth defects and parents of children who did not have birth defects started in May of '82 with anticipation of completing interviews in about thirteen months. As we were coming to the close of our interviewing phase, we

found that we were not getting, we were not finding people as quickly as we were and we felt that we needed to extend our interviewing sessions for several more months to come up to the standards that we had established for our study, that is, a location made of 80 percent and interviewing approximately 90 percent of those who we located.

In the fall, '83, we did come up to those standards for the mothers who had children with birth defects and we also had others, the controls that did not have children with birth defects. Our analysis started after collecting the final data tape in about December of '83 and we are now in the process of that analysis.

The analysis is rather complex as you might well imagine. We're using several advanced statistical techniques, and we're in the process of doing several ongoing analyses right now.

We anticipate that taking into account the need for checking and rechecking our data to be sure that we are confident of the results, plus the need to have certain reviews that are just necessary for the papers and the report to be published to complete the study in six to twelve weeks. And if there are any questions I'll be glad to try to answer them.

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

Ŕ

DR. SHEPARD: Any questions from members of the committee? If not, fine. Thank you very much, Dr. Mulinare. I would like now to recess the full committee and divide up into our subcommittees. The epidemiology and biostatistics committee will stay here and the information education committee will adjourn to room 139 down the hall. Thank you.

(Whereupon, at 10:13 a.m. the meeting was adjourned to reconvene into committees.)

#### AFTERNOON SESSION

DR. SHEPARD: I think we must reconvene and get through the remainder of the agenda if we get started now. I'd like first of all to complement the chairmen of our two subcommittees. I think they've done a marvelous job of chairing these two important subcommittee activities.

I think that it's a demonstration of a continued interest that the attendance at these meetings continues and it's to the credit of the subcommittee chairmen that they've been able to make those subcommittee meetings as productive as they have been. I'd like first to call on Dr. Hodder to give us an overview of the activities of the epidemiology and biostatistics subcommittee. Dr. Hodder?

#### EPIDEMIOLOGY AND BIOSTATISTICS SUBCOMMITTEE

DR. HODDER: The first two presentations were basically amplifications of the presentations that had been made already that morning. Dr. Erickson in talking about the CDC studies brought up a question that had been raised before about female veterans, the women who had served in Vietnam and updated us on the status of that.

The first question of course being the feasibility. There were initially concerns that it would be

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

very difficult to locate most of these women, particularly those who had changed surnames after getting married.

To their surprise, using Social Security Numbers, they were able through IRS to locate a fairly good percent. Joe, do you know the percentage on that? Was it 60 percent?

DR. MULINARE: He didn't mention it today. Over 60 percent.

DR. HODDER: And that was in part due to the way the IRS handled particularly secondary names. They would require only Social Security Numbers for that person. It was mentioned there were roughly 7,000 women who served in Vietnam of which 5,000 were nurses and that prompted further discussion about alternate ways of finding cases.

Specifically, Steve Lamm mentioned a study, I think it was by a Dr. Hanican, that was

as a possible way of doing case control these women. The studies on / other point mentioned on the question of women was whether it was necessary to do a separate study for women, the specific area where it would be was in the study of fetal loss or in gender specific cancers.

However, since most women were nurses, the

exposure would be quite different from combat veterans.

They would be exposures around hospitals. In that case, it would not be an Agent Orange

but rather a Vietnam experience type of study if it is feasible to do it. There was a followup question on soft tissue sarcoma raised at that point which I will incorporate later.

Dr. Matthews continued his discussion of the

Australian morbidity study. He amplified particularly

some of the questions on the selection of cases; how

they would be looking, and what they would be looking for.

Specifically, he was separating the consequences of

characteristics of the

exposure to war from / type of person who would go to

war.

That's the main reason, for example, that they have chosen to look at draftees rather than career soldiers. They feel this is as homogeneous a group as possible. They/will able to separate the post-war syndromes from that are common following any war war exposures. Also, as in the Ranch Hand study, they will be able to adjust for associated variables like cigarettes and alcohol that may be used differently in that population.

He feels that the interest in Australia is for predominantly/Vietnam experience, not just Agent Orange, and that they feel comfortable that their groups, at least in the mortality study are quite comparable.

The next presentation was a new study where

Dr. Kang reviewed the VA inpatient file for patients with soft tissue sarcoma between
Code
1969 and 1982. He used the ICDP171/as his initial screen,
finding 418 cases. In looking at those

who could have been Vietnam vets, when he looked through the pathology, he found 394 where he could get the pathologies; of those 234 were confirmed case soft tissue sarcomas, 7151 were considered not likely to be a soft tissue sarcoma.

Then he was able to link/the records

the Personnel files
up with/St. Louis/to finally come up with a cohort of

214 people with soft tissue sarcoma with a military
record. Then he was able to look at
the proportion of those who had been in Vietnam; 37
percent of those people had been in Vietnam; 61 percent
non-Vietnam; 2 percent in Thailand.

He then looked at another cohort of people

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

from the in-patient file, this time 14,000 people,

to see if the proportion who served in Vietnam was similar in both groups. And in essence

the proportion was about the same.

The proportion of people with soft tissue and with RVN experience sarcoma/versus people from the VA in-patient file, in general, seemed to be roughly the same. However, that was a report. relatively preliminary / There still are some things that need to be done and Dr. Kang will follow up on these. he will For example, /check for latency and see if there's been a change in frequency of diagnosis as time has gone on.

Dr. Williams presented studies on soft tissue in central east Michigan. He's very early on in planning those studies but he discussed with us some of the difficulties of ascertainment of case as well as difficulties in choice of residents and how to define the cases relative to your controls.

DR. SHEPARD: Thank you very much. Any questions for Dr. Hodder? Okay. I'd like next to call Sub- on Mr. Mullen to give us a synopsis of the/committee that he chairs.

EDUCATION AND INFORMATION SUBCOMMITTEE

MR. MULLEN: Thank you, Dr. Shepard. We had

two guest speakers in our subcommittee, one covering the

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

upcoming films or proposed upcoming films and the other covering the library system here at the VA to include the video library.

Danny Jones spoke with us about the two films that they are putting together at St. Louis. One is geared to the veteran, his family and veterans' groups and another which talks in more scientific language aimed at the clinicians. And we didn't believe that the way in which the VA was proceeding with this was proper since that the most frequently recorded difficulty lies in the inability of the intake personnel or the environmental physician to show the sensitivity, compassion or expertise, and particularly expertise with regard to the intake personnel, which is causing somewhat of a mass displeasure among Vietnam veterans who are going for the Agent Orange exam.

We felt that the film for the clinicians should be put together last if at all and that a film educating the intake personnel and the environmental physician should be put out and tested and then followed up by a film aimed at the concerned veteran and his family, explaining to him what he is to expect when he goes for an Agent Orange examination. We felt that the film geared in this direction would have been more effective than

written material as sometimes it's tended to be pushed aside and would give more of a review of the actual hands on technique that could be inferred from written material.

Mr. Jones said he would look into that and of course -- and get back to us with a final decision about what's going to be done. The second presenter was -

DR. SHEPARD: Excuse me, Fred. I wonder, while it's still fresh in everybody's mind, maybe I could follow on. We did, during the break in fact, have a meeting, and it was decided that we would accept the recommendation of your committee and we're going to go along those lines.

What's going to happen next is Dan Jones and his group in St. Louis will put together a questionnaire that he will circulate among members of the committee and we'll ask other veterans' groups to take a look at it and also to make comments, additional items that might be included with the film and very shortly thereafter put out an outline of the contents of all three films again for comment so that that will then form the basis of the script for what we now are planning to do in terms of three films, one geared to the veteran, one geared, I'm not listing these in priority order just for the sake of completeness, one geared to the veterans and veterans

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

families; one geared to, as you say, intake staff of VA

medical centers and regional offices; and the third, for

more scientific treatment of the various research efforts.

So taking your recommendations in hand and proceeding

along those lines.

MR. MULLEN: Thank you, Doctor. I appreciate that.

MR. FALK: He just made your day.

MR. MULLEN: Sure did. The second speaker was Ms. Jean McVoy from the VA Central Library here who gave us an explanation as to some of the written and video tape material that's at the disposal of various veterans and veterans groups to include copyright material from various TV series that are not Agent Orange specific, but geared more to the overall Vietnam experience.

can be on loan, but most of them are in three quarter format inch/so you'd have to have more or less specific type of equipment. She said there is a master on all of these kept, I believe, at St. Louis or thereabouts, and you can get a copy of the film for somewhat under \$100 and virtually any format you want, to include 8mm and 16mm films.

We did ask Ms. McVoy to recommend that those

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

VA facilities having the Agent Orange film,

Agent Orange--Where Do We Stand, not to show the film

anymore, and again I'm sure this would have to be, this

recommendation would have to be passed onto higher

channels to get it okayed. But again, we're just reregistering our displeasure with that film and again, reiterating our request that it not be shown anymore.

We talked also with Mrs. Nancy Howard who is with going out /a SERP team to West Haven, and we have a little difficulty with that, too, because I think we mentioned in past meetings that you tend to find a little bit more with of a problem / staff in a major urban area at VA facilities than you would find in smaller, rural areas where the community is small enough where virtually everybody knows everybody. And in a situation like that, you're going to receive very few complaints which has in fact been verified through polls taken by various service organizations.

Most of the difficulties in the Agent Orange screening examination program tend to lie in the major metropolitan areas. And while we see the assignment of Nancy Howard as a foot in the door and a foot in the right direction in accordance with our past recommendation, we felt that the system would be best served by looking in those areas where you have the most complaints, and

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Bolt. & Annap. 269-6236

therefore can adjust your audit criteria accordingly

By looking at a worst case situation and improving that, there's bound to be a trickle down effect and you can be covering more than one hospital at the same time whereas if you go into a rural setting you might not find anything wrong and you're not going to be able to adjust your criteria for further inspection of other facilities.

So while we do appreciate her assignment to SERP, we do feel that it should be rearranged a little bit for a better service system.

DR. SHEPARD: Can I just comment on that, just so that it's very clear. This is the first of what I presume will be a number of visits, and as I announced earlier this afternoon, I am leaving for

Chicago to do some of the same kinds of things that she'll be doing in West Haven.

I will then be going to Denver and also to Boston. So I think we've got, we're trying to cover the waterfront as quickly as we can given the limited staff that we have. But again, this is one, you know, of a series of visits she'll be making and I don't think there was any intent to confine it.

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

MR. MULLEN: No, no. I didn't mean to imply that.

DR. SHEPARD: No, I know.

MR. MULLEN: Well, while you are going to

Chicago and Denver and then later on, Boston, I'm sure

that you have a list of your so-called worst case Agent

Orange screening program, those places where you're having

most of your major complaints. Is Chicago, Denver, Boston

among those?

DR. SHEPARD: Well, your question implies that we have a list of VA hospitals that are not doing a good job, or the implication is there. I don't, I'm not aware of any such list. I'd be happy to receive that list.

MR. WILSON: We'll gladly give it to you.

DR. SHEPARD: Okay.

MR. MULLEN: I was referring to, as I mentioned earlier in administrative procedures, if a case goes to the Board of Veterans Appeals and it's not administratively correct or there's lack of administrative due process, the regional office will be notified and they will be given what we call a variance, okay, which is more or less a demerit and later on their service is rated upon that. Now, by you going out to these three places, you're just going out there to look it over.

# FREE STATE REPORTING INC. Court Reporting • Depositions D.C. Area 261-1902 • Balt. & Annap. 269-6236

You're not going out to grade. Or are you going to make recommendations to SERP for the updating of the criteria?

DR. SHEPARD: Yes, the latter. We want very much to formalize the criteria or to more formalize the criteria against which hospitals are rated on this issue. So we want to develope a scheme for judging the quality of how the programs are going in individual hospitals.

So this effort will be largely that, to see what's there. To see what ways we can, what methodology we can use for actually evaluating the program. But it will be both. I mean, we will be evaluating the programs and then establishing more criteria for further evaluations at other hospitals.

MR. MULLEN: Okay. This is old business and new business and that is the registry data. I understand within the past couple of months you've made some inroads to get the information out to reclassify it from the 85,000 misclassified diagnoses that were in the registry from early on. Is that correct?

DR. SHEPARD: You say misclassified diagnoses?

MR. MULLEN: Okay. Let's just say not fully useable.

DR. SHEPARD: Okay. Maybe it would be helpful

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

3 4

5

6

7 8

9

10

11

12

13

14

15

16

17

18

19

20

21

22 23

24

25

Roughly. if I gave a brief update on what's going on. /85,000

examinations were conducted using the former code sheet which has now been replaced with a new code sheet.

And by the new code sheet, I think, were somewhere around 15,000 examinations using the new code sheet. The process for doing the examination and so forth and recording the results of the examination in the patient's record, in the veteran's record, has not substantially changed over the years.

So the basic information is still there as it has been. The only thing that has really changed is the way in which we enter that data into computerized registry data base. Now, one of the major differences that has

happened is that we are asking that the actual diagnosis and the code, the ICD-9 code, is incorporated in that input process which was not the case in the previous one.

MR. MULLEN: It was ill-classified.

DR. SHEPARD: Pardon me?

MR. MULLEN: Was it ill-classified? I mean, what prompted the change to a new code sheet?

DR. SHEPARD: Very simple. We were not able in any kind of automated way to access the information. So it's not a question of accuracy. We just put it into a

> FREE STATE REPORTING INC. Court Reporting . Depositions D.C. Area 261-1902 • Balt. & Annap. 269-6236

ا ۾ ا	
2	computer in a more retrievable and meaningful way.
3	MR. MULLEN:
4	Have you attempted to go in and reclassify and
5	reinput any of the old material?
- 6	DR. SHEPARD: No.
7	MR. MULLEN: Are there plans to do that?
8	DR. SHEPARD: No.
9	MR. MULLEN: So if the purpose was to put the
10	diagnoses in under ICD-9 and all you had before was the
11	diagnoses and I don't know if there's a copy of that
12	diagnostic code in the rating schedule or not which is
13	less specific.
14	DR. SHEPARD: It has nothing to do with the
15	rating schedule. These are medical records, not -
16	MR. MULLEN: Okay. Now, when you want to access
17	this material to determine rates of occurances for speci-
18	fic types of diseases, I would assume that's why you're
19	putting it into ICD-9.
20	DR. SHEPARD: Not really.
21	MR. MULLEN: Well, isn't that the purpose of
22	this registry to have this material accessible?
23	DR. SHEPARD: Only in part, Fred. As we've
24	said many, many times, the principle purpose of the
25	registry remains, as it was in its infancy, to
	•

provide a mechanism for concerned veterans to

get an examination, get their questions answered, hope
fully, and be placed in a way in which we can follow up on

examination, share information with them and so forth.

As a spinoff we thought it would be a good idea to get some kind of a feel for the kinds of problems the veterans were experiencing that was, in a general way, part of the previous input process. We felt that it would be nice to know more precisely what kinds of, what diagnoses are being made or confirmed in the field.

And that's what caused us to make the change.

But that is not the principle purpose. It never was and for the can never really be the principle purpose / registry because it is a voluntary self-selected group of veterans.

So it is not for the purpose of comparing the health of veterans in the registry with any other group of veterans.

It's to get a feel for the kinds of problems that these veterans are experiencing. Very little in the way of analysis will be made of this data because it's not data that can be analyzed or compared readily to any other group because the makeup of this group is not easily defined.

MR. MULLEN: So that 85,000 is the way it is

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

DR. SHEPARD: The records are there; the information is there. If at some point in time we needed to have that information, if there was a very persuasive reason for having that information, we could reaccess that information, but it would be a hand count kind of thing

We would have to be persuaded that

MR. MULLEN: So when we discussed this last time, I thought that we were led to believe that there was going to be some effort to go back in there and get those names in order to update that information and perhaps send a letter out advising them that they could come in for a new examination.

DR. SHEPARD: Okay.

there was a very good payoff for doing that.

MR. MULLEN: Now, is that abandoned?

DR. SHEPARD: It was discussed. We did discuss it. We looked into it and we thought that the benefit of doing that would not warrant the effort and the expenditure of resources that that would take. In other words, we don't think we've learned very much more information that would be of value to us or to the veterans.

Now, in terms of coming back for another

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

6

7

8

9

10

11

12 13

14

15

16

17

18

19

20 21

22

23

24

25

for another examination, a veteran can always come back There's no limit to his coming for another examination. back for an examination if there's something -

> MR. WILSON: They don't know that.

DR. SHEPARD: Let me clarify that. For administrative reasons we have not allowed repeated initial examinations.

But there's never been anything said about a veteran coming in for a followup examination. many veterans have been reexamined a number of times and have been counted as followup examinations.

MR. MULLEN: So he can come in and request an Agent Orange examination, he will get an examination, but even though it's in the same nature as the initial examination, it's considered a followup rather than initial so it won't go down as two initial examinations.

That's basically correct, but the DR. SHEPARD: veteran will not necessarily receive another complete examination. MR. WILLIAMS: Dr. Irving in Philadelphia told

Ms. -- and she says no, you may not go back for reexamina-Would you please convey this to her?

They can receive followup examina-DR. SHEPARD: tions but the initial exam will not be repeated. Obviously, there is some confusion.

> FREE STATE REPORTING INC. Court Reporting . Depositions D.C. Area 261-1902 • Balt. & Annap. 269-6236

MR. WILLIAMS: I'm sure there is, and as long as it's clarified, that's all.

MR. MULLEN: Okay. We had a couple questions that I was a little bit confused on. One of them is from a gentleman who raised the issue of special studies with programs for minorities groups, Blacks and Hispanics, or an explanation as to how the scientific community was integrating them into the studies presently being undertaken to include CDC's epidemiology studies and I can't answer that.

I asked him to refer to the scientific panel, on and I'm not going to touch that any more. There was also a request by a panel member that we set up, as a future agenda item, an update on implementing, or update on the Agent Orange resolution or proposed legislation HR-1961 and implement a start up program due to the impending passage of that bill by the Senate and I don't know, I don't feel that that's necessary because I think the mechanisms are already in place to deal with that.

Mr. Walkup

But if perhaps / would like to expound on that a little more, I don't know another answer to give him.

Perhaps someone else could answer that.

MR. WALKUP: Well, that was mine. My concern was twofold. One, in case the legislation or other

legislation were to pass, what does the Veterans Administration have in place to be able to implement that. And the other is, what is the Veterans Administration position on that and other bills that have been there.

I'm sure you've been called upon to testify about those bills at different times. I think it would be useful for the members of the committee to know the VA's position on that legislation. So 1961 is one of those, but there are other pieces of legislation which have been and undoubtedly will be in the hopper. I think it would be useful for our subcommittee to at least know what the Veterans Administration is doing about them.

DR. SHEPARD: I don't feel it's appropriate for me to address that issue at the present time. It's really sort of outside the purview of this committee, but I think if you're concerned about what the VA's position is vis a vis the various pieces of legislation, that it would be appropriate to address such a request to the Administrator and get, find out what the Agency's position is on the legislation.

In terms of implementing legislation that already exists, I don't think there's any pat answer to that. Various pieces of legislation have been passed over the years and depending on the nature of the legislation

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

The one I know most about because I was inti
mately involved in it, was Public Law / and it's my

recollection that that, the implementing instructions were

not fairly promptly following passage of that piece of

legislation. Anything else for me?

MR. MULLEN: Yes. I have one other inquiry from the floor from a state rep asking why our subcommittee is not advising VA to change their stated position on HR 1961 and use our subcommittee as a lobbying organism and I didn't feel that that was appropriate and I didn't address the question any further. I believe that, as full

committee chairman, if you would kindly state the function of this panel for the benefit of those who are not distinctly clear on it, I would appreciate it very much.

DR. SHEPARD: Okay, I'd be happy to. I think that the committee was originally set up in order to provide advice to the Agency on matters related to health problems that might be ascribed to herbicide exposure.

I agree with you. I don't think it was ever the intent nor do I think it would be an appropriate mission of this committee to act as a lobbying effort to influence legislation or even influence the Administrator

as to how he or the President ultimately should respond to legislation.

There are other mechanisms for doing that. I think it would subvert the real intent of this committee to get involved in that kind of an effort. But I think it's a legitimate question, but that's my personal view on the matter, and I'd be happy to entertain any questions on that point.

MR. WILSON: I'm the one who brought that question up.

DR. SHEPARD: Excuse me, we're still on the committee.

MR. MULLEN: I have nothing else.

DR. SHEPARD: Okay. Are there any other questions of the committee to Mr. Mullen concerning his subcommittee's deliberation? Okay. We now have time for some questions from the floor so lets open it up.

## COMMENTS AND DISCUSSION

MR. WILLIAMS: Dr. Shepard, I just want to clarify some misquotes that I made and some misunder-standing that Dr. Thomas FitzGerald made to the Veterans Administration. I don't know, is Dr. FitzGerald here? from the American Legion.

DR. SHEPARD: Unfortunately, he had to leave.

# FREE STATE REPORTING INC. Court Reporting • Depositions D.C. Area 261-1902 • Balt. & Annap, 269-6236

2 MR. WILLIAMS: Okav. He has since seen Mr. 9 3 Sommers who made the quote in his office at the American 4 Legion so apparently he did recall something. 5 from West Virginia went through the archives on the ninth 6 floor. Jean McVoy 7 what was up there so he went up and dug it out and there 8 is a statement by the American Legion, John Sommers, De-9 puty Director, to the House Science, Technology and 10 Subcommittee on Environment that he has reviewed not 11 hundreds of thousands of feet as I had said, that was 12 erroneous, but official Department of Defense films 13 showing operations of defoliation and supposedly no heavy

exposure to the crew.

1

14

15

16

17

18

19

20

21

22

23

24

25

Sommers pointed out that for several years the Air Force has made a number of presentations stating that they, the Ranch Hand people were the heaviest exposed due to Agent Orange because they flew with cargo hatches and windows open. And after reviewing the film he found out that none of these windows were in fact open in the films that he viewed.

gave us a nice tour of

And he testified again that he believed that the people who were sprayed the heaviest were the soldiers doing the backpacking in open trucks spraying the pari-And he goes on to state that the idea was is that meter.

> FREE STATE REPORTING INC. Court Reporting . Depositions D.C. Area 261-1902 • Balt. & Annap. 269-6236

I did misquote the hundreds of thousands of feet, but they have reviewed it.

It was not a study. It was a review, and Mr. Sommers is quite concerned about the fact that the Air Force is still using the statement that they were the heaviest exposed veterans of the war. He says and I believe that that's even considered -- at this time.

DR. SHEPARD: Well, I don't know how you would settle that question other than doing studies, and I don't know at this stage of the game how that could be possible. I think that Dr. Lathrop's comments were based on his extensive discussions with members of Ranch Hand group.

I don't think that seeing film footage necessarily disproves that Ranch Handers were heavily exposed.

I think that based on what I've been told, a large number of them were. I think what's being said, it's my understanding, as an identifiable group of people, that they were probably the most heavily exposed group that served in Vietnam.

MR. WILLIAMS: And that's probably an incorrect statement. It's some people's opinion.

DR. SHEPARD: Well, as an identifiable group of individuals. Now, I'm sure nobody would say, would quarrel with the statement there may have been other

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap, 269-6236

people who were not Ranch Handers who were more heavily exposed than some Ranch Handers. I think that's quite conceivable and I've never heard anybody in the Air Force say that that's also, you know, not true.

That's why I was very careful to say that as an identifiable group they were probably among the most heavily exposed. Yes, Wayne Wilson?

MR. WILSON: I don't recall, just to clarify what Mr. Mullen said, using the word lobby and I certainly understand the distinction between lobbying and what the supposed role of this committee is. You know -- and I have been coming down here for about three years and really don't enjoy coming down here any more.

You know, I recognize that this is to be an advisory committee. I see that in some way those that are not part of the scene here should have some way of having some imput. I wrote in our Commander's Update that I had talked to two or three members of the committee and found that there was little interaction between meetings other than some cursory review of some documents.

Now, we had, Mark and I, and some of the other states had made some I think valuable suggestions in terms of advice to the veterans part of this committee.

And I know Mr. Mullen passed that on to you folks. The

point I want to make is this, finally, is that the advice that we give and the recommendations and advice that Mr.

Mullen and his representatives give never seems to come to pass.

You know, when we talk about notifying 85,000
Vietnam veterans, we're not just saying that to say that.
We believe it's important that they know that they may have a second exam or perhaps they should know that some of the data they put in in 1978 or early 1979 may not be good data, okay.

And so we never seem to get a clear answer nor is the advice taken. When are we going to see, you know, I remember this committee, Mr. Mullen and Mr. Woosley saying that they wanted to see that film that the VA put together.

And I remember sitting right here, correct me,

Mark, if I'm wrong, and saying that you guys were promised

that you would get a chance to see that film before it was

edited and before it was released, and you did not. I

still have not seen that film, and I know there are people

in this room who have not seen this film.

And you know, we want to come here and have some very small successes in terms of the veterans we serve by the hundreds of thousands outside of Washington. And

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

4 5

I have said that I believe that perhaps I've been coming down here too many years to too many advisory committee meetings because it's not clear to me as a Vietnam veteran who works every day in this business what the role of this committee and if their advice is really sought.

And I'm not sure, my boss is here, and I'm not sure I want to come back here anymore because I'm not, I don't really feel that those of us who travel many thousands of miles to come here, I don't think anyone really cares about our advice. And we don't have enough -No, Mr. Mullen, Mr. Walkup, Mr. Woosley, I work with 100,000 Vietnam veterans in the State of New Jersey.

Fred has called me once. I have called you once. Mr. Woosley has never called me. Dr. FitzGerald doesn't like me. He has never called me. And you know, I have to wonder. I come here. I think that I have a right to speak and to be a part of the process, not a member of the committee, sir.

But we have no contact, okay. It's like, it seems like it's very staged anymore. Now, maybe this is my perception and maybe what you ought to do is ask some of the Vietnam veterans that run programs what their

feelings are. I don't speak for them. I'm telling you what my feelings are.

And I'm very disappointed that we don't seem to have a free flow of dialogue and bringing to fruition some of the things that Vietnam veterans outside of the crystal palace here want. And I'll bet you, maybe you ought to ask the Vietnam veterans whether 85,000 letters should be sent to guys that were previously examined under the screening exam and see what they say.

Maybe you shouldn't ask me or Mark or Mr.

Credle. Maybe we're not as objective as we used to be.

But I think at some point other people have to have a role in this business.

And I'm not just going to sit on the veterans because I'll tell you. None of you doctors and none of you scientists have ever called, either. And I'm going to tell you one more time, I'm going to invite an open invitation to anyone of you, anyone of you at the expense of the State of New Jersey, is that all right, to New Jersey and spend a couple of days with our Commission and we believe we're in the trenches and with our Vietnam veterans and their families.

I invite anyone of you at State expense to come up. At least it will be money well spent for us and I

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

think you'll get to see some of the things you don't see in this room. And I think this committee ought to think about perhaps maybe holding some meetings in some of . these Commission states.

Apparently, it would be more convenient for Mr. Walkup to travel to Minnesota than all the way to Washington. So these are what's very much on my mind. These are the things we're talking about.

And I'm going to leave here today, and I know other people will, very frustrated with what takes place here anymore. Okay. Thank you.

DR. SHEPARD: Thank you, Wayne. It is a frustrating issue, there's no question about it, and I'll be the first to admit it and I think you. I share many frustrations. Just for the record, however, you will recall that I did spend a day in New Jersey with the Commission.

I consider that a very fruitful and very
educational effort. Maybe it's time to do it again. I'll
be happy to certainly consider that. I haven't received
an invitation from you, but I would be happy to -

MR. WILSON: We would prefer that you not come.

I would be interested in some of these other members of the committee, actually.

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

DR. SHEPARD: Okay. Then I would suggest you write them.

MR. MULLEN: I do have a recommendation. Since to go into the registry you're not going/and recode the 85,000 diagnoses that are in there and in spite of the fact that I've heard that a lot of Vietnam veterans are not getting their Agent Orange newsletter, I think that's the exception rather than the rule, it would be very simple to put a blurb in the next newsletter that goes out stating you are entitled to another examination if you haven't had one

and that would dispense with that because even though the 85,000 diagnoses may not be classified under ICD-9, I would venture that most of the addresses are still intact. And that would put an end to that.

DR. SHEPARD: Okay. Yes? Dr. Hodder?

DR. HODDER: I'm just curious as to why would you want to go back into the 85,000.

If a project came up where that it would be of benefit to do that I could see it, but is it worth taking the time -

MR. MULLEN: If I'm not mistaken, that was one of the main gripes of GAO and Capitol Hill when they first undertook to look at that. They were dissatisfied of with the classification diagnoses, was one of the complaints, and I thought for that reason and since the VA is

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap, 269-6236

3

5

6

7

В

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

undergoing another GAO study of the registry, that that would be of prime importance.

Not only that, I passed on this recommendation to the full committee through the recommendations of my subcommittee and that's how I answer that.

MR. WALKUP: I think some of the concerns that veterans have after this has been discussed for a while is probably misinformation more than anything, and what Fred's asking you is to get something clarified. some vets are concerned that maybe this means that they didn't get a good exam the first time; that they didn't look for the right stuff or something like that or that somehow their name got lost and that something else happens, nothing's going to happen to them. My name got I don't get the newsletter. lost.

> MR. WILSON: Me, too.

MR. WALKUP: Those kinds of things happen . You, know / one point we were

going to redo the 85,000, and then we weren't. of information gets out a lot of different ways, and if it just gets clarified, just tell people this is how it is now, this is what's happening, then at least

people know that they can go back for a followup reexamination which some people apparently are being told that they can't have.

MR. MULLEN: There's another thing here. Between and during lunch break between subcommittee and full committee, I stopped to talk to Mr. Woodall in the hallway and he told me within the past couple of months there has been an effort to go in and codify those diagnoses. So, you know - what is the story.

MR. WILSON: Is that right, Mr. Woodall?

MR. WOODALL: Yeah. I talked with them, you know, about three months ago, before the holiday break and we've got some problems in that early part. We've got some address problems. We've got some -- that people don't receive their newsletter and saying what is the problem. I think there's a large number out there that have some concerns about our '78 and '79 reviews.

DR. SHEPARD: Well, we'll certainly look into it. I would like the input of the state organizations on that point.

MR. WILSON: Mr. Mullen brought this point up on September first.

DR. SHEPARD: Wait a minute. Now, you're not hearing me. I didn't say that it's a new, the point's never been raised before. What I'm asking for is additional input into where the confusion may lie in

reexamine any veteran who is concerned or continues to be concerned. Number two, the misconception about somehow if they weren't in the first 85,000 then something, the examination wasn't thorough or we've done something different to change the process; somehow, they need to have a new examination because the other one wasn't as good and that's why we changed the process.

You see, I can understand how those misconceptions are there, but they really aren't valid. We have not changed the examination process per se.

MR. WILSON: Yes, you have.

MR. WILLIAMS: The intake is different, Doctor.

DR. SHEPARD: Well, not substantively we have not changed it.

MR. WILSON: Okay. And you were not required to notify veterans before 1981.

DR. SHEPARD: That's not part of the exam.

MR. WILSON: That's important. '78, '79, '80

veterans were not required to be given the detailed

results of their exam, and many were not. That's important.

That's a problem that veterans still have very much so

and that and they never received the results. Now, you

know, this is something, this is not new to you, Barclay.

We've discussed this for years now.

DR. SHEPARD: That's an after the exam fact. That's not the exam itself.

MR. WILSON: It's very important.

DR. SHEPARD: Okay. I don't doubt, I don't question that point.

MR. WILSON: When do we ever pin something down here? That's what I want to know.

DR. SHEPARD: Okay.

I'd

like to call on Chuck Conroy. I'm going to call on Chuck

Conroy because he has an interesting piece of information

I think should be shared. Chuck is the representative

from the State of West Virginia.

MR. CONROY: Chuck Conroy, coordinator for the State of West Virginia Agent Orange Program. I like Wayne have been coming here, not as long but for the last couple of years now, and I've heard a lot of dialogue relative to the satisfaction or lack thereof with the VA's Agent Orange exam.

Most of you know that in our West Virginia

Agent Orange Program we are advising veterans that we
would like them to initially go to the VA to receive
their Agent Orange screening examination. There were some
veterans on our advisory committee that voiced the

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt, & Annap. 269-6236

concern that we would have a substantial number of veterans that would balk at going through the VA.

I thought it would be interesting to provide
to the committee, an update on our report. As of this
morning, we've mailed out 27,000 of these
brochures, one to every state Vietnam veteran. As of
this morning we've had 3893 responses requesting testing.

Of those 3893 respondents, 76 as of this morning have balked at going to the VA. In other words, they have said that they will in no way, shape or form go to the VA. This represents, if my math serves me right, approximately 2 percent of the West Virginia Vietnām population.

So I thought I would like to present that information and let the audience and committee draw whatever inferences they'd like from that. Thank you.

DR. SHEPARD: Thank you very much. Yes, Dr. Lingeman?

DR. LINGEMAN:

and having
these meetings / been a member of this committee for four
years, I have noted that the committee has received
concrete proposals for scientific studies.

For example, we have a protocol for the epidemiologic study we can look at, and we can

2	evaluate and we can make specific recommendations.
3	of the nonscientific and some But the some/members of the panel/of the people
4	constantly who sit in the audience complain/about what the VA
	who sit in the audience complain/about what the VA
5	isn't doing. It seems that there is not a united effort
6	on the part of all these various groups, includi
7	the different state groups, and those members of veterans
8	committee. groups that sit on this / It seems to me that
9	all of these different
10	groups could present some sort of a proposal that we
11	could act on as a committee, that all of you would agree
12	on, perhaps Mr. Mullen could
13	groups serve as a chairman to represent all these/
14	In other words, instead of bringing up one point at a
15	time and arguing and complaining about it, a
16	could be prepared written protocol/stating the complaints and specific
17	recommendations about what should be done
18	so that they can be evaluated systematically by
19	the committee.  MR. MULLEN: They're in the minutes. They are
20	listed. recommendations are so
21	DR. LINGEMAN: But the / fragmented over a
22	period of time. There's never any agreement on what
23	should be done.
24	MR. MULLEN: We have to keep hitting away at
25	
	the same problems over and over and we get one

FREE STATE REPORTING INC.

Court Reporting • Depositions D.C. Area 261-1902 • Balt. & Annap. 269-6236 and the rest slide and then we get one the next time and the mest slide. And that's the problem we're having. We have been complaining about intake examinations for the longest time, yet there's still discrepancies and difficulties out there in the VA centers.

If there weren't, the VA would not be sending out inspection teams. And they would not be trying to assemble a standard set of criteria with which all the intake centers must comply. And you know, Dr. Lingeman, we've been complaining about that for a long time, but we get nowhere with it.

We're only asking for certain things and it's the same thing over and over and over. But they're of record. They are of record, and I don't think that it's as fragmented as it may seem because I think all veterans groups no matter whether they're the traditional service organizations or the individual Vietnam veterans groups that are out there in the audience, we all want the same things.

We want a little equity and we want this equity doled out in the proper manner. We have to answer questions every day. We deal with the veterans one on one. All we're looking for is the answer to give these people. Yes, they said they're going to do it.

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

Well, two things have happened that have been concrete. One, we asked for a routine pelvic examination

at our last meeting and that just came out, routine pelvic and breast examination for all female veterans.

Barclay acceded to one of our requests for rearranging the film formats or the method of release and he's also stated today, yes, you can have another examination. But these are three concrete things that have arisen out of our committee meetings, three. And I've been coming here as long as you have, Dr. Lingeman.

DR. LINGEMAN: Well, why can't this all be put together in one document and why can't it include what already has/been done --

MR. MULLEN: For a simple reason. First of all, different veteran service organizations have different political preferences. Some are more conservative than others. Some take different stands on the Agent Orange issues than others.

Some are for the legislation paying compensation; some are against. When you've got those different types of ideologies, it's hard to please everyone and you know, you can't, you have to solicit from each individual organization a list of what's to be done and

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

then have someone compile the most frequent and the most practical recommendations and that's the only way it can be done.

DR. LINGEMAN: Isn't that what the CDC/ when they wrote the protocol for the epidemiologic studies? This proposal was subjected to review by many individuals and scientific groups. The CDC they, had lots of input and finally/the people who are responsible said okay, this is the protocol.

MR. MULLEN: Where was it put together, though, Dr. Lingeman?

MR. WILSON: CDC.

MR. MULLEN: At CDC, in one central location.

We're from all over the country. We don't have one
individual area of study. We don't have the same area
thus we can't get our ideas together.

MR.WALKUP: I think she's got a good idea.

It could be that it might be a good start to recommend that the Veterans Administration hire a consultant group to attempt to investigate problems that we've raised and that other vets have raised and recommend -

MR. WILSON: That's like asking, you know - MR. WALKUP: Wait a minute. No , I think it's

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

the same thing and that we come up with a protocol of concerns and a schedule of how those could be investigated and alternatives to resolution.

DR. SHEPARD: Excuse me, just a minute.

I've got an important appointment; I've got to leave now. Dr. Hobson will take over. I just did want to make this point, that if any state organizations, commissions or veterans groups have knowledge of any veteran who is not on the mailing list, if they will please give us the name and address of that veteran, we will make certain that the veteran does get on the mailing list.

To my knowledge, nobody has provided us with that information, and we have always stated very clearly that we're open to receive any kind of information updating. In fact, we've repeatedly requested veterans to maintain their names on the mailing list, and if it isn't done through the local VA hospital, we will do it in this office. Thank you very much. Dr. Hobson will take over for me because I have to leave.

DR. HOBSON: Is there anyone else who would like to raise any points either from the audience or from the panel?

MR. MULLEN: I would like to make just one

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

We can't do that for the simple reason it's almost logistically impossible. You know, we can't make conference calls. Even if we could, I doubt if you would get us all in one place at the same time because of our varied duties.

The fact remains, the VA asked service organizations long ago, long ago including the VFW which I was working for at the time, to go out to your membership; get us a list of all the problems that you've got and we did. I think VFW came up with almost 50,000 responses.

We put it together, gave it to the VA. Nothing happened. And the same problems still exist. So while, you know, it has merit, I think it's logistically imposible because it involves policy rather than science.

MR. WILSON: Let me just say one thing, too,
Dr. Lingeman. We have made countless recommendations.
You know, we don't want to come here just to criticize
and complain. We have made countless recommendations
that would include our common objective, to serve Vietnam

veterans and their families at levels that deal with intake or examinations or notifications following exams, the kind of basic stuff while we wait for the science to be done.

I can tell you, and I have the documents to prove that those recommendations have generally fallen for the most part on deaf ears. Now, I have heard Mr. Mullen talk for almost three years now, and he's absolutely correct when he says that there have been many, many, many recommendations and suggestions, whatever you want to call them, made through the chair and I can show you in reviewing the transcripts of these meetings, countless occasions with the veteran representatives and the other people, and the followup was never implemented on those even rudimentary types of suggestions that would improve the things, the basic things that we have difficulty with the VA.

As an example, 60 percent I understand of the environmental physicians today were not participants in the program at Silver Spring. So we have three fifths of the people examing veterans today who were not part of that original group and may not be as up to date according to the veteran organizations as the original group of people.

FREE STATE REPORTING INC.

Court Reporting + Depositions
D.C. Area 261-1902 + Balt. & Annap. 269-6236

. 14

The VA says that they don't have the money to bring them in until possibly 1985. Now, you know, I have to question that considering some other reports that we have. So we aren't getting satisfactory answers to some of the questions that are raised. I recognize the chairman, Mr. Falk.

MR. FALK: Thank you. I feel I have to comment on my impressions because I don't have the personal frustrations that Wayne and some of the rest of you do have. I haven't been coming down through the years. The Commission in New Jersey has been sending Wayne and Peter and Mark and we've been getting reports from them back, but I think it was at the stage where I did want to see for myself what was happening.

I am very concerned as to why -- mainly concerned with science today. I'm not a scientist or doctor.

I'm an attorney, but I purposely chose the scientific subcommittee to sit through because again, the feeling that I get back in New Jersey dealing with the veterans is that time is running out on answering the question.

The science that I heard here today broke down to two parts. One is the CDC study and the long term studies are still a long way away. The second is the studies that are complete, the Ranch Hand and the STS

studies at this point can be summarized as the Colonel said, basically by reassurance.

where you and the VA is heading in the short term, and even to the long term, until the CDC studies and some other studies come, back; and I think you have a real problem on your hands because the veterans are not going to accept that type of reassurance attitude for the next two years. The science tests will have to move faster and the answers have to come along with a level, if there's going to be reassurance, it better be reassurance that the veterans can look at and accept and I don't think you're going to have that level of acceptance.

DR. HOBSON: Why do you think we won't have it?

MR. FALK: I think there are too many other indications from accepted scientific areas that there are problems in these same areas. With the soft tissue sarcomas, I didn't come up the soft tissue sarcoma area as a problem area. The scientists and the veterans defined that as an area to put in the studies.

There was a good science indicator that there is a problem with soft tissue sarcomas. I sat through the science meeting here and found that the VA studies apparently conclude that not only is it not a substantial

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

problem but the studies that they have show there are less Vietnam veterans with soft tissue sarcomas than nonveterans.

I don't think the veterans are going to accept that science. I can't give you a valid scientific comparison as to all the other studies that are out that challenge that finding, but if you go up on the Hill and say our conclusion is that there is absolutely no soft tissue sarcoma problem, I can tell you from my experience that veterans are not going to accept that scientific conclusion.

DR. HOBSON: Let me correct one thing. results that we have do not show that there are less. It shows that we were not able to demonstrate more. That's all.

MR. FALK: Well, the numbers I heard here were actually less amongst the Vietmam veteran group even though you didn't come out and make that statement, that was the -

DR. HOBSON: This becomes a matter of interpretation of science and the scientists' interpretation is that it did not show any difference between the two groups. That was all. Yes?

> MS. KOPYSTENSKI: Now that the Supreme Court has

cleared the way for the class action suits, they'll begin selecting the jury on May seventh. And part of the class action suit provides not only for a super fund for Vietnam

veterans but --. It also allows for the VA to be reimbursed. Now, if the VA contends that there are no problems, the VA cannot put in on the veterans' behalf for reimbursement. What is going to happen within the next let's say two years? Is the VA going to suddenly find that our children are birth defected, I'm a wife, that our husbands are dying miracuously, you understand that? Or are you going to forego the billions of dollars on the reimbursement list?

DR. HOBSON: I do not know what the VA policy is about any reimbursement. I do know that we will follow what the science shows and we'll report what the science shows and that's as far as we can go.

MS. KOPYSTENSKI: In other words, you will not, we are allowing in our class action suit for the VA to assume, as a third party, the reimbursement of any treatment provided to the veteran.

DR. HOBSON: I'm sorry. I am not a lawyer and I would not make that policy under any circumstances.

I cannot answer your question as to what the VA is going to do in that respect. Are there any other questions or

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

Θ

comments? If not, it's a little past our time.

MR. WALKUP: I did have one. You wanted to finish up the health notices. We can drop that. But I wanted to follow up on the issue of race which was raised in our committee with the -- numbers from the other side.

The issue was raised that specifically during the blood pressure and possibly the effects of sickle cell anemia that Black veterans health experience might be different from the total population when we're looking for health effects of herbicide. Is that something, and we've seen in the protocols that race is something that's asked about.

Is there any kind of control that is happening in these studies, any subgroups that are happening in any of these studies to look at differential health defects for Black or Hispanic or Asian or veterans, vis a vis White veterans since I assume that White veterans would be the ones who come out the majority of the time?

DR. HOBSON: The studies that I know about are be all designed to/analyzed in terms of race. There is an attempt made to get a balance, a racial match if you wish, between the control groups and the ones for Vietnam.

The data are analyzed in terms of race. They are in

the Ranch Hand study for example. So the answer is it is not being ignored at all. It's being looked at.

MR. WALKUP: That's a selection factor to make sure that there's no -- groups?

DR. MULINARE: Let me put another perspective on it. I'm not sure that it is going to answer your question, but in order to be in the armed forces, you have to be free of certain illnesses or diseases. A Black veteran who has, let's say, I'm not sure and I'd have to ask and find out, but if someone who has sickle cell disease would actually be inducted into the Army.

Those kinds of diseases are taken into consideration on that basis, that they're not part of the study because it would be very difficult to find veterans who did not have sickle cell disease five minutes before, he wouldn't become a veteran in essence. Is that the kind of question that you're asking about?

MR. WALKUP: In part. I think - Let me put it another way in terms of how it was expressed. Is race a selection factor so that you have experimental and control groups paired on race so that race goes away as a factor, or is there, are there interaction effects that are looked at after the outcome? Can you say that there's no statistical difference based on race after the study is

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

complete?

DR. MULINARE: I don't believe the studies are matched analysis. There's a -- match. Say, for the birth defects study, we did match in a way, and I'll explain this as we get the results later on when we have the results.

But there are two ways to deal with these problems. You can deal with them at the beginning of your design and match for them and then eliminate that as a problem in your subsequent analysis. Or what you can do is contruct a sample that's large enough so that later on, once you do your analysis, you can take in factors like race, sex, age of the person, a whole number of factors and still have a sample size that's large enough to give you statistical results.

So there are two ways of dealing with it and it just depends on what the trade-offs are in your study.

MR. WALKUP: Which are you doing?

DR. MULINARE: We're doing a little bit of both. Seriously, in the birth defects study there is very serious consideration as to whether or not we should match. It's always felt that it's better not to match and then deal with those kinds of situations in your analysis, as long as you have large enough numbers. But there are

considerations initially where you want to be sure that you do take into account those kinds of factors and since we know at least for birth defects that there is some hint that some birth defects are more common among certain ethnic groups than others, we try to take that partially into account initially before we did the study as part of the design.

MR. WALKUP: It sounds like you answered my question. You told me what I wanted to hear. Now, let me say it back to you. I'm not sure I heard it right. You are attempting to make sure that we've got some, we are somehow approximating the distribution of Vietnam veterans in the same proportions or roughly as those who served when you get to an experimental group and also that there are sufficient numbers going into those groups so you can look at possible effects that are attributable to race if they are indeed that?

DR. MULINARE: Yes.

MR. WALKUP: Okay.

DR. MULINARE: And remember that there are two different types of studies we're talking about. We're talking about case control studies where we are choosing our study sample on the basis of birth defects, and then there are cohort studies where we're choosing our

FREE STATE REPORTING INC.

Court Reporting • Depositions

D.C. Area 261-1902 • Balt. & Annap. 269-6236

victims?

\_-

study subjects on the basis of exposure and we have to take that into account.

And then you deal with these other confining factors. And when I listened I thought I heard you saying what about the Black Vietnam veteran who has sickle cell disease, has he been taken into account and I say put that in perspective of the type of men who went through physical examinations. We found that you won't find those men in the Army.

They may be in the Army and in fact they're in the Air Force, but I don't know if that was a criteria to be used to eliminate them from being drafted for Vietnam.

I don't know. You could answer that better than I could.

DR.HOBSON: Did you have a question, Doctor?

DR. CREDLE: A question or maybe a comment regarding Black and Third World Vietnam Agent Orange

DR. HOBSON: You'll have to talk louder.

DR. CREDLE: I raised that question and one of my concerns is not only the process of a study but another part is reporting the results of the study.

For example, you talked about the Ranch Hand Study but you mentioned nothing about ethnic identity of the people who were the process.

involved in / I have a major problem with that because

my assumption from where I sit as an administrator at a university where I know some of the details of what we are talking about, but in my view as a Black veterans like me, veteran, I know that will look at who's giving the scrutinize report and/who's around the table. The results are that I would say, /well, wait a minute, they're talking about someone else, they're not talking about me.

And so my concern would be the other part of the report
as well. Not only the report, but what's coming out of it,
such as who's involved. And I
think we need to do that all along. You know, we've got
the same kind of problem of credibility when the final
Vietnam
report is in. It's already hard enough getting/veterans
to come
into the VA system.

Vietnam veterans to come into the system. It is harder to talk about the Hispanic veterans/which is another issue

Hispanic veterans
because most of us assume that / speak American and
they don't, not necessarily, you know. Some of them speak
Spanish. We don't have a mechanism to get in touch with
them and I don't think, you know, money is being provided
for that once the report gets out. So I'm having all
sorts of problems with what's happening with this process.

DR. HOBSON: The report that Colonel Lathrop gave this morning was a very abbreviated report of the

FREE STATE REPORTING INC.

Court Reporting • Depositions
D.C. Area 261-1902 • Balt. & Annap. 269-6236

does make comparisons of Black and non-Black and quite extensively. One of the reasons we did not go into it was that he was not able to demonstrate any significant differences between the Black and the non-Black veterans in this particular study.

And generally speaking, that's what's done when you try to give a report in a short time. You only mention the things that come out positive. You don't mention the things that come out negative.

DR. CREDLE: I'm saying that that is a crucial issue mistake particularly with this/and we're talking about of the 30 percent/combat veterans. I mean, that's a very significant number and you've got to speak to them on this issue as well.

DR. HOBSON: Don't worry. It will be said. It was not said here because he was condensing the talk. I heard him talk yesterday and he did mention it as I recall so it depends on the circumstances. We're going to have to cut this short pretty soon because there are people who have to leave. Yes?

MS. KOPYSTENSKI: I have a question .

When the

test results come back that for example, Dr. Kahn and the New Jersey Commission are doing which is extensive and

painful for the veteran involved, the testing process, when the CDC tests come back, what is going to happen if it is found that all those fears are recognized? Is the VA going to do a study on the results of those tests, or is some action going to be taken?

DR. HOBSON: Now, you've mention when the results come back, and if it's proved. That's the crucial point.

MS. KOPYSTENSKI: Is the VA going to recognize that proof?

DR. HOBSON: If the proof is there, now that means scientific proof, not proof in your own mind or my own mind or somebody else's own mind, if there is a consensus that this is an effect, I can't imagine under any circumstances that Congress would not compensate the veterans and I can't imagine that the VA would oppose it at all. We never have when there was any kind of medical consensus to show that an effect was a consequence of military service. I don't imagine it will begin here, either.

MS. KOPYSTENSKI: And the children? issue of

DR. HOBSON: The /children depends on Congress.

That we have no control over. That becomes a Congressional matter because we have no authority to compensate

2	children, asside from providing education and health
3	benefits.
4	MS. KOPYSTENSKI: If the scientific data is
5	there -
6	DR. HOBSON: If there is a general scientific
7	is, medical consensus, the answer/the VA would back it. I
8	have every reason to think so. Certainly I would, per-
9	sonally. Any other questions? If not, I'm sorry, we're
10	going to have to cut it off.
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	(Whereupon, at 2:25 p.m. on Tuesday, March 6,
22	1984, the meeting was adjourned.)
23	
24	
25	

# AIR FORCE HEALTH STUDY (PROJECT RANCH HAND II)

# AN EPIDEMIOLOGIC INVESTIGATION OF HEALTH EFFECTS IN AIR FORCE PERSONNEL FOLLOWING EXPOSURE TO HERBICIDES

**BASELINE MORBIDITY STUDY RESULTS** 

BRIEFER: GEORGE D. LATHROP MD, PhD



EPIDEMIOLOGY DIVISION
USAF SCHOOL OF AEROSPACE MEDICINE (AFSC)
BROOKS AIR FORCE BASE, TEXAS 78235

# AIR FORCE HEALTH STUDY

- WHITE HOUSE DIRECTED
- EXTENSIVE PEER REVIEW
- UNIQUE STUDY POPULATION
- STUDY DESIGN
  - MORTALITY
  - MORBIDITY: QUESTIONNAIRES,
     PHYSICAL EXAMS
  - FOLLOW-UP

# STUDY RESULTS

NO SOFT TISSUE SARCOMA (STS), PORPHYRIA CUTANEA
 TARDA (PCT), OR CHLORACNE DIAGNOSED IN RANCH
 HANDERS

## FERTILITY/REPRODUCTIVE

- MOST FINDINGS BASED UPON UNVALIDATED SELF REPORTS
  - NO SIGNIFICANT RANCH HAND OR OFFSPRING FINDINGS FOR:
    - SPERM COUNT, OR DEFECTIVE SPERM
    - FERTILITY/INFERTILITY (5 MEASURES)
    - MISCARRIAGE, STILLBIRTH, LIVE BIRTH
    - SEVERE BIRTH DEFECTS
    - MODERATE BIRTH DEFECTS

# PRE VERSUS POST ANALYSIS OF REPORTED BIRTH DEFECTS (BY SEVERITY)

	<u> </u>		
	PRE	POST	
Y N	51 1672	32 885	P = 0.46
Y	32	22	P = 0.35
Y N	7 1716	26 891	P < 0.000
Y N	50 1385	18 726	P = 0.18
Y N	27 1408	20	P = 0.22
Y N	10 1425	10 734	P = 0.13
S	•		
– Y N	62 1980	34 12 <b>75</b>	P = 0.46
Y N	40 2002	34 1275	P = 0.22
Y N	20 2022	18 1291	P = 0.29
	NYNYN YNYNYN YN YN YN YN YN YN YN YN YN	Y 51 N 1672 Y 32 N 1691 Y 7 N 1716 Y 50 N 1385 Y 27 N 1408 Y 10 N 1425 S Y 62 N 1980 Y 40 N 2002 Y 20	Y 51 32 N 1672 885 Y 32 22 N 1691 895 Y 7 26 N 1716 891 Y 50 18 N 1385 726 Y 27 20 N 1408 724 Y 10 10 N 1425 734 S Y 62 34 N 1980 1275 Y 40 34 N 2002 1275 Y 20 18

# **NEONATAL DEATHS**

# (UNVERIFIED SELF REPORTS; MEDICAL RECORDS, DEATH CERTIFICATES PENDING)

RATE/1000.

	RANCH HAND	COMPARISON
BEFORE RVN	13.4	16.0
AFTER RVN	16.8	3.4

### CANCER

- NO SIGNIFICANT DIFFERENCE IN THE OCCURRENCE OF "SYSTEMIC" CANCER
- NO SOFT TISSUE SARCOMA FOUND IN RANCH HANDERS
- SIGNIFICANTLY MORE VERIFIED SKIN CANCER IN RANCH HAND GROUP
  - NOT ADJUSTED FOR SUN EXPOSURE

### LIVER

- RANCH HANDERS SELF REPORTED MORE LIVER AND PCT-LIKE SYMPTOMS
  - NOT VERIFIED AS YET BY MEDICAL RECORDS
  - NOT CONFIRMED AT PHYSICAL EXAM (NO PCT)
  - NOT SUBSTANTIATED BY LAB TESTS
- SEVERAL MINOR LAB TEST DIFFERENCES
- MORE VERIFIED MISCELLANEOUS DISORDERS IN RANCH HANDERS; SIGNIFICANCE UNKNOWN

## **PSYCHOLOGY**

- NO GROUP DIFFERENCES IN IQ OR PERFORMANCE TESTING
- ANALYSES REFLECTED KNOWN SUBSTANTIAL EFFECT OF EDUCATION ON PSYCHOLOGICAL TESTING
  - SUBJECTIVE MEASURES SHOWED SIGNIFICANT GROUP
    DIFFERENCES PARTICULARLY IN HIGH SCHOOL EDUCATED
    PERSONNEL (QUESTIONNAIRE, CORNELL INDEX, MMPI)

# **CONCLUSIONS**

- STUDY MEASURED TRUE HEALTH STATUS TO MAXIMUM EXTENT POSSIBLE
- ALL SIGNIFICANT FINDINGS ARE BEING FOLLOWED UP
- INSUFFICIENT EVIDENCE TO SUPPORT HERBICIDE CAUSALITY AT THIS TIME
- FINDINGS TO DATE SHOULD BE REASSURING TO RANCH HANDERS
  - NO CHLORACNE MEANS LOW EXPOSURE VERSUS CHEMICAL WORKER POPULATIONS
  - NO MAJOR CLINICAL HEALTH PROBLEMS
  - OVERALL GOOD GENERAL HEALTH FOR AGE

#### MINUTES

#### SUBCOMMITTEE ON EPIDEMIOLOGY/BIOSTATISTICS

Richard A. Hodder, M.D., M.P.H. (Walter Reed Army Institute of Research), Chairman of the Subcommittee convened the meeting at approximately 10:30 a.m., Tuesday, March 6, 1984. Other subcommittee members and alternates present were: George R. Anderson, M.D. (Texas Department of Health); Donald Barnes, Ph.D. (Environmental Protection Agency); Thomas A. FitzGerald, M.D. for Irving B. Brick, M.D. (American Legion); and Carolyn H. Lingeman, M.D. (National Institutes of Health). Barclay M. Shepard, M.D., Chairman of the full committee and Director, Agent Orange Projects Office, also was present, as were a number of other individuals in the audience. The meeting was open to the general public. Recognizing that the meeting began slightly behind schedule, Dr. Hodder requested that the speakers be brief in their presentations.

#### CDC EPIDEMIOLOGY STUDY AND WOMEN VETERANS

Dr. J. David Erickson, Centers for Disease Control (CDC), Atlanta stated that since everybody at this subcommittee meeting was also present at the full committee session, he would only go over the highlights of what CDC is currently undertaking. Last Spring, CDC decided to evaluate the feasibility of studying women veterans. They decided to defer the study. They were concerned about the fact that after women left the service, in many cases, they would be changing their names due to marriage. With the help of the Agent Orange Army Task Force, they put a small sample of women veterans' names through the Internal Revenue Service process and found women veterans can be found as easily as male veterans. IRS has changed their process and now CDC can get female veterans' addresses by having only their social Security number, even if husband is primary filer, in the case of joint tax returns.

CDC is now trying to decide how such a study of females can be done. They may begin using records in Federal Records Center in St. Louis. They will send a team to St. Louis to assess feasibility of pulling up samples of women veterans. CDC has computer tapes of all records located at the Records Center.

Another issue that concerns CDC now is what is a suitable comparison group for a number of women Vietnam veterans. They would welcome any suggestions from committee in that regard.

#### AUSTRALIAN ACTIVITIES

Dr. John Matthews, who spoke about various Australian studies during the full committee session, touched on the highlights of these efforts in the subcommittee meeting. He indicated that Australian scientists believe they should restrict their studies to draftees and not men who enlisted. There is good evidence that Australian soldiers who volunteered are different from general population. Literature shows that after all wars there is a certain pattern of morbidity for a period of time, deaths being due to various causes. The compensability of war-related disabilities is different in Australia than United States.

In men of Vietnam era, there will be studies on things that may be war related as well as Agent Orange related. 44,000 Australian persons served in Vietnam; one half of that figure are being studied. They are still gathering data. No results are available at this time. They will also be looking into cases of men who died from alcohol and smoking.

#### PATIENT TREATMENT FILE/SOFT TISSUE SARCOMA REVIEW

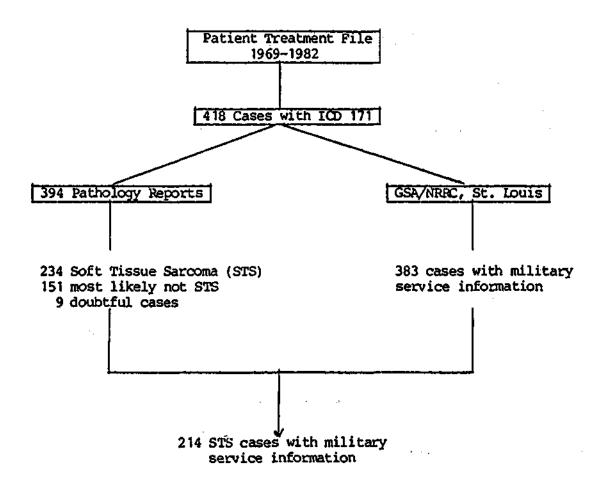
Dr. Han K. Kang of the VA Agent Orange Projects Office presented a review of soft tissue sarcoma cases for Vietnam-era veterans in the Patient Treatment File from 1969-1982. He reported that 36 percent of the soft tissue sarcoma cases served in Vietnam; whereas in the overall patient treatment file, 41 percent of Vietnam-era veterans served in Vietnam. These figures suggest that for Vietnam-era veterans in the VA medical facilities, the frequency of soft tissue sarcoma among veterans who served in Vietnam is not greater than that among those who did not. (A copy of the slides presented by Dr. Kang is attached).

#### SOFT TISSUE SARCOMA STUDY IN CENTRAL EASTERN MICHIGAN

Dr. Daniel E. Williams from the Center for Environmental Health Sciences, Michigan Department of Public Health then described a soft tissue sarcomas study in Central Eastern Michigan. Dr. Williams distributed a handout detailing the study (see attached). He stated they are looking at an eight county area. This area is a mixture of rural and city. An eight county area was chosen with idea that major population centers in Michigan are near Lake Huron and the population is generally stationary for long periods of time.

The meeting was adjourned at approximately 11:45 a.m.

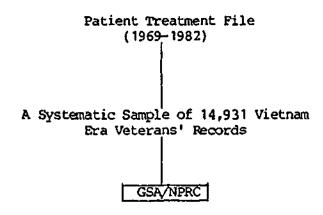
#### SELECTION OF SOFT TISSUE SARCOMA CASES



#### Soft Tissue Sarcoma Type By Military Service Status

Trena.	Non Vietnam	Maril and	Michan	Moto!
Type	Aracusu	<u>Thailand</u>	Vietnam	Total
Fibrosarcomas	22	2	10	34
Synovial Sarcomas	17	2	8	27
Rhadomyosarcomas	16	-	В	24
Liposarcomas	16	<b>-</b> ·	9	25
Undifferentiated Sarcomas		-	7	15
Leiomyosarcomas	8	-	11	19
Malignant Hemangioperi-	•			
cytomas	10	-	2	12
Malignant Schwannoma	4	-	5	9-
Dermatofibrosarcoma				
Protuberans	3	_	6	9
Malignant Fibrous				
Histiocytomas	4	-	2	6
Kaposis Sarcoma	5	1	2	· 8
Epithelioid Sarcoma	4	_	2	
Embryonal-extragonadal	1	-	1	6 2
Alveolar soft part	3	-	**	3
Angiosarcoma	3	_	1	3 4
Mesothelioma	3		1	
Malignant Mesenchyoma	-	_	2	4 2
Other	4	-	1	5
Total	131	5	78	214
Percent	(61.2%)	(2.3%)	(36.5%)	(100%)

# A Systematic Sample of Vietnam Era Veteran Patients in the PTF



13,496 Vietnam era Veterans with military information

	<del></del>	<del></del>
Non-Vietnam	7,679	(56.9%)
Thailand	273	(2%)
Vietnam	5,544	(41.1%)
Total	13,496	(100%)

# Comparison of STS Cases and PTF Patients for Vietnam Service Status

		STS	PTF	
Vietnam Service	Yes*	83 (39%)	5,817 (43%)	5,900
	No	131 (61%)	7,679 (57%)	7,810
	•	214 (100%)	13,496 (100%)	13,710

# \* Including service in Thailand

	1	STS	PTF	ł
Vietnam Somion	Yes*	78 (36%)	5,544 (41%)	5,622
Service	No	136 (64%)	7,952 (59%)	8,088
	•	214 (100%)	13,496 (100%)	13,710

\* Excluding service in Thailand

# Comparison of STS Cases (ICD 171) and PTF Patients for Vietnam Service Status

	,	STS	PTF	l
Vietnam Service	Yes* 145 (39%)	5,544 (41%)	5,689	
	No	230 (61%)	7,952 (59%)	8,182
	•	375 (100%)	13,496 (100%)	13,871

\* Excluding service in Thailand

#### A STUDY OF SOFT TISSUE SARCOMA IN CENTRAL EASTERN MICHIGAN

#### BACKGROUND

Data suggesting an excess of STS cases

- 1. Mortality data from "U.S. Mortality Rates adm Trends, 1950-1978" and "Midland County Soft and Connective Tissue Cancer Report, May, 1983"
- 2. "Midland County Cancer Incidence, 1979-1982, MDPH"

### **OBJECTIVES**

- 1. Determination and confirmation of sarcoma cases within the eight counties to determine incidence.
- 2. To associate place of residence, occupation, dietary habits, personal habits, and other variables with sarcoma cases utilizing case control design.
- 3. To assess study methods in terms of efficacy, cost, and alternatives.

### DEFINITION OF SARCOMA CASES

- 1. Histological diagnosis of malignant cell origin arising in a variety of organs
- 2. Cases to be found by pathology report review
  - A. Compare physician, oncology nurse practitioner, nosologist interpretation
  - B. Compare to routine tumor registry coding
- 3. Pathological confirmation
- 4. Clinical follow-up to confirm that the sarcoma diagnosis continues

#### SELECTION OF CONTROLS

- 1. Population controls utilizing a random selection of phone number
- 2. Hospital controls without malignancy

Daniel E. Williams, M.D. Center For Environmental Health Sciences Michigan Department of Public Health 405 W. Greenlawn Lansing, MI 48910 (5]7) 372-6425

# Subcommittee on Veterans' Education/Information

Mr. Fredrick Mullen, Sr. (Paralyzed Veterans of America), Chairman of the subcommittee, convened the meeting at approximately 10:30 a.m., Tuesday, March 6, 1984. Other subcommittee members and alternates present were: Mr. George T. Estry (Veterans of Foreign Wars); Mr. Hugh Walkup (National Veterans Task Force on Agent Orange); Mr. Noel C. Woosley (AMVETS); and Mr. Charles Thompson (Disabled American Veterans). Officials from several state Agent Orange commissions were also present, along with Col. Lorraine Rossi, who chairs the VA Advisory Committee on Women Veterans.

#### Old Business

- Mr. Mullen read a list of statements/recommendations which the Subcommittee on Veterans' Education/Information made at the last full committee meeting on December 6, 1983. These included:
- 1. A question regarding the literature review update--can we get more information from DOW? The answer was no.
- 2. References to gender in Agent Orange studies--mothering/fathering children (in the Literature Review/Analysis) and future VA publications.
- 3. Requirement that female veterans be given pelvic exam as part of routine Agent Orange exam.
- 4. Feasibility of a study on women veterans.
- Reclassifying/recovering registry data.
- 6. Report on progress of videotapes.
- 7. Asked that VA stop showing film "Agent Orange: Where Do We Stand?"
- 8. Educational conference for Environmental Physicians.
- Mr. Marc Williams of the New Jersey Agent Orange Commission stated that he had received no answer on his question at the last Advisory Committee meeting regarding how many of the original Environmental Physicians are still serving in that capacity, and also stated that he was examined several months ago for an Agent Orange exam by a non-physician. Mr. Mullen responded that he had received from the VA information regarding who attended the various educational conferences and he would be happy to share this with Mr. Williams or anyone else.
- 9. It was announced at today's meeting that Ms. Nancy Howard of the Agent Orange Projects Office will be serving as a member of a SERP team, and that Dr. Shepard will be traveling to Chicago, Denver and Boston in the near future and will be observing the Agent Orange programs at these hospitals.

- 10. The matter of adding women to the panel--a representive from the Advisory Committee on Women Veterans, perhaps--was brought up. (Colonel Lorraine Rossi who chairs that committee was invited to attend today's meeting.)
- 11. Report on Literature Review Update and discussion of possible lay language summary by Dr. Carl O. Schulz of Clement Associates. (The subcommittee recommended at the 12/6/83 meeting that the lay language summary be written.)

Mr. Hugh Walkup stated that members of the subcommittee had received a handout on the Agent Orange registry, but that he did not understand its function. He also asked what had been decided on his question at the last meeting about having a transcript of the subcommittee meetings typed up and distributed to the members. Mr. Donald Rosenblum explained that the Agent Orange Registry statement was an attempt to clarify information regarding the Registry including its purpose, uses and limitations. He also stated that we were taking notes at the meetings, but there would not be verbatim transcripts, and that the subcommittee members could get copies.

Mr. Williams asked what exactly will be done about the original 85,000 exams and what he should be telling veterans as to whether they may or may not request a second examination.

## Progress Report on New Videotapes

Mr. Danny Jones of the Regional Learning Resources Center, VAMC St. Louis, Missouri, was present and discussed the status of the planned Agent Orange videotapes. He stated that the first tape that they are considering making will be for veterans, veterans' families, and concerned individuals. The second film will be for the scientific There is also a possibility for a third tape or information of some sort to be made for environmental physicians and VA employees, to include handling of veterans when they first come to a VAMC. He stated that a determination is now being made as to what may be relevant, and they are using comments and suggestions made by committee members and others regarding the prior tapes, "Agent Orange: A Search for Answers" and "Agent Orange: Where Do We Stand?" He stated that an outline of the first videotape, for veterans and their families, will be sent out for comments hopefully by the end of March. He would like it to cover such things as how to apply for benefits, how to get an Agent Orange exam, and how to get on the registry, and that it will look at specific VA studies, and will use interviews with researchers, veterans and veterans groups.

Mr. Jones anticipated that the tapes should be ready by the end of the calendar year.

Mr. Mullen stated that he felt it would be nice to have tapes for veterans groups, families and clinicians, but he felt that most problems are intake problems—lack of sensitivity, need of quality control, etc. He felt that the order of production of the tapes should be changed and that there should definitely be a tape made for VA employees and Environmental Physicians and that it should have top priority. He felt that the information for these people should definitely be a videotape rather than written information.

Mr. Walkup made a motion that the subcommittee recommend that the priorities of the films be reversed, and that the first film made should be for the information of VA personnel. Mr. Woosley seconded the motion, and all were in favor.

# Library Efforts

Ms. Jean McVoy of the VACO library was present and discussed information which is presently available in the library concerning Agent Orange. She presented a handout (see attached) on audio visuals which are available on Agent Orange and also the Vietnam War. She stated that the libary is looking for a commercial production on Agent Orange but cannot find one that is scientifically accurate. She stated that the VACO library has a catalog on all audio visuals in the network, and has suggested that field stations do the same with their collections.

Mr. Mullen asked if the VA allows copying of in house films. Ms. McVoy stated that the library has bought most of the videotapes and that they cannot be used in Beta or VHS machines, and that it is illegal for the VA to copy them, but they can be purchased from GSA. Ms. McVoy advised that there is presently a film in every district titled "A Gift From Mrs. Tim" which deals with insensitivity of hospital staff, and suggests that all hospital staff take a look at it.

### Discussion of Veterans' Concerns

Mr. Williams again asked what is going to be done about the original 85,000 exams and stated that he had been examined by a non-physician.

Mr. Mullen stated that on December 6 the question was asked at the full committee meeting what efforts are being made to redefine or reclassify the information on these original exams. It was asked if the VA will send out letters to identified veterans recommending that they come back in for a second exam. It was also asked if veterans are not getting the Agent Orange Review can it be assumed they are not on the Registry?

Ms. Nancy Howard of the Agent Orange Projects Office stated that there are many highly mobile veterans, who move around a lot, and that these veterans should be advised to report their change of address to the nearest VA facility.

Ms. Howard also informed the subcommittee that she will be making her first SERP visit the week of March 12 through 16 in New Haven, Connecticut. She stated that she will be auditing MAS and will be looking specifically at the Agent Orange Program. She stated that there is specific criteria for conducting Agent Orange exams and that she will be checking to see that this criteria is being followed. Mr. Mullen asked what happens if the guidelines are not being followed. Mrs. Howard stated that the service receives a report recommending corrective action. If the matter is of a serious nature it is referred back to Central Office Medical Administration Service.

Mr. Woosley stated that small medical centers are not the ones that are having problems, that in small hospitals for the most part veterans are pleased with their exams and the physicians, but it is entirely different in the larger stations, and he felt that the ones where most problems are should be the ones being audited.

Mr. Estry asked if Mrs. Howard would be looking at the qualifications of the environmental physicians. Mrs. Howard informed him that she would not.

## Future Agenda Items

Mr. Mullen asked if anyone had items to be put on the agenda for the next meeting, tentatively scheduled for June 5, 1984.

A member of the audience asked what efforts are made to contact veterans groups that are "not traditional" veterans groups.

Another member of the audience asked how someone from the "Network" would petition the panel to have a member represent them. Mr. Mullen advised her that they would have to submit a name for consideration and that it would have to go through the Administrator.

A question was also raised by a member of the audience as to the lack of minority participation. He also stated that blacks have health concerns that whites do not have, such as sickle cell anemia and a higher incidence of high blood pressure, and wanted to know if studies were being done to show how exposure to dioxins affects the health of blacks compared to whites. Mr. Mullen advised him that all meetings are open to the public, and that outreach centers deal one-on-one with all ethnic minorities. He also stated that minorities are not being excluded from the studies, but that he did not feel it necessary to break down the studies as far as ethnic minorities. Mr. Walkup suggested that this question should be raised to the scientific group at the full committee meeting.

Mr. Walkup stated that an item to be included on the agenda should be an update on procedures used to implement existing legislation. In case 1961 passes, what is being done now to implement it? Mr. Mullen stated that there is nothing to implement. Either a veteran has one of the three disabilities or he doesn't--it's cut and dried.

The meeting was adjourned at 12:00 noon.

AUDIOVISUAL AND PRINTED MATERIALS AVAILABLE IN THE VA LIBRARY NETWORK (VALNET)

# Audiovisuals

- 1. Agent Orange: a search for answers, Veterans Administration, 1981, (videocassette), All Health Care Facilities
- 2. Genetic counseling: a practical demonstration of a counseling session for parents of a Down's child, 1978, (videocassette), District
- 3. Practical aspects of genetic counseling, United States Army Medical Department, Fort Sam Houston, 1973, (videocassette), District

# Audiovisuals in Production

1. Agent Orange: clinical update (audience - hospital staff), estimated completion date December 1984, (videocassette), All health care facilities 2. Agent Orange: update (audience - general public) estimated completion date December 1984, (videocassette), All health care facilities

# VA Video Digest

#3, Special report on Agent Orange, 1983, (videocassette), All health care facilities,

Audiovisuals on the Vietnam War or Vietnam War era

- Anderson platoon, Films Incorporated, 1969, (videocassette), Regional
   Front line, Filmakers Library, 1979, (videocassette), Regional
- 3. Frank, a Vietnam veteran, Fred Simon Productions, 1981, (videocassette) Regional
- 4. Good morning, Vietnam, Foxhole Production, 1978, (videocassette) Regional
  - 5. Hearts and minds, BBS Productions, 1974, (16 mm), Regional
- 6. Spooks and cowboys, gooks and grunts, CRV Television Network, 1976,
- (16 mm and videocassette), Regional
- 7. Vietnam: ten thousand day war, Information Television Productions Limited and Cinequity Funding, Inc., 1980, (26 videocassettes) Regional
- 8. Vietnam: a television history, Public Broadcasting System, 1983, (videocassette), Regional
- 9. Vietnam memorial, Public Broadcasting System, 1983, (videocassette), Regional
- 10. The war at home, Catalyst Films/Madison Film Production Co. 1979. (videocassette), Regional
- 11. Warriors' women, Dorothy Tod Film, 1981, (videocassette), Regional
- 12. Young veterans program, Veterans Administration, 1982,
- (videocassette), Regional

## Print materials

All print materials listed below have been delivered one copy to Library Service at each health care facility

- 1. Birth Defects, Genetic Services, International Directory, 7th edition, 1983, The National Foundation - March of Dimes
- 2. Case Control Study of Congenital Anomalies and Vietnam Service, Australian Government, 1983 (ordered but not yet received)
- 3. Chemical Sythe: lessons of 2,4,5-T and dioxin by Alastair Hay, Plenum Publishing Corp., 1982
- 4. Clinical Genetics and Genetic counseling by Thaddeus E. Kelly, Year Book Medical Publishers, 1980

- 2
  AUDIOVISUAL AND PRINTED MATERIALS AVAILABLE IN THE VA LIBRARY NETWORK
  (VALNET)
- 5. Continuing Education Conference on Herbicide Orange (2nd : 1980 : Washington, D.C.), Proceedings from the 2nd Continuing Education Conference on Herbicide Orange, Veterans Administration, Department of Medicine and Surgery, 1981
- 6. "Cytogenetic Diseases," Clinical Symposia, volume 35, no 1, 1983. CIBA Pharmaceutical Company
- 7. "Dioxin," Chemical and Engineering News, vol 61, no 23, June 6, 1983, American Chemical Society (two copies sent to Library Service at each medical center, one for the medical library and one for the patient library)
- 8. Genetics in medicine by James S. Thompson and Margaret W. Thompson, 3rd edition, Saunders, 1980.
- 9. Human and environmental risks of chlorinated dioxins and related compounds edited by Richard E. Tucker, Alvin L. Young and Allan P. Gray, Plenum Press, 1980
- 10. Operation Ranch Hand: the Air Force and Herbicides in Southeast Asia 1961-1971, United States Air Force, Washington, D.C., 1982
- 11. Review of the literature on herbicides, including phenoxy herbicides and associated dioxins, Veterans Administration, Department of Medicine and Surgery, 1981
- 12 Vietnam: a history by Stanley Karnow, Viking Press, 1983. (The order is in process)

Regional delivery level means one copy is in the Library Service at each of the 7 Regional Medical Education Center host hospitals. The regional libraries are in Birmingham, AL, Cleveland, OH, Long Beach, CA, Minneapolis, MN, Northport, NY, Salt Lake City UT, and St. Louis, MO.

District delivery level means one copy in Library Service at a designated library in each of the 28 VA medical districts. The district libraries are located in Togus, ME, Buffalo, NY, Northport, NY, Lyons, NJ, Pittsburgh, PA, Perry Point, MD, Salem, VA, Durham, NC, Augusta, GA, Tuskegee, AL, Lexington, KY, Miami, FL, Cleveland, OH, Battle Creek, MI, Danville, IL, Wood, WI, Chicago, IL, Minneapolis, MN, Little Rock, AR, Waco, TX, St. Louis, MO, Topeka, KS, Des Moines, IA, Denver, CO, Prescott, AZ, Long Beach, CA, Palo Alto, CA, and Vancouver, WA

All health care facilities delivery level means one copy is in Library Service at each medical center. VA medical centers with two divisions have one copy for each division.



# Advisory Committee on Health-Related Effects of Herbicides Transcript of Proceedings

Twentieth Meeting June 5, 1984

1	VETERANS ADMINISTRATION
2	<del></del>
3	
4	
5	Advisory Committee
6	on
7	Health-Related Effects of Herbicides
8	
9	
10	
11	
12	
13	Veterans Administration
14	Central Office Room 119
15	810 Vermont Avenue, Northwest Washington, D. C.
16	
17	
18	
19	
20	
21	Tuesday, June 5, 1984
22	
23	
24	
25	

(202: 234-4433

COURT REPORTERS AND TRANSCRIBERS 1330 VERMONT AVENUE, NW

**NEAL R. GROSS** 

WASHINGTON, D.C. 20005

1	ADVISORY COMMITTEE:	
2	BARCLAY M. SHEPARD, M.D., Chairman Director	ļ :
3	Agent Orange Projects Office Veterans Administration	
4	Washington, D. C.	
5	GEORGE R. ANDERSON, M.D. Occupational Medicine and Toxicology	
6	Texas Department of Health Austin, Texas	
7	DONALD BARNES, Ph.D.	
8	Senior Science Adviser U.S. Environmental Protection Agency	
9	Washington, D. C.	İ
10	GEORGE T. ESTRY Appeals Consultant	
11	Veterans of Foreign Wars Washington, D. C.	
12	THOMAS J. FITZGERALD, M.D.	
13	Medical Consultant National Veterans Affairs & Rehabilitation	
14	American Legion Washington, D. C.	
15	RICHARD A. HODDER, M.D., M.P.H.	
16	Colonel, Medical Corps Deputy Director, Division of Medicine	
17	Walter Reed Army Institute of Research Washington, D. C.	
18	CAROLYN H. LINGEMAN, M.D.	
19	National Toxicology Program Archives National Institutes of Health	
<b>2</b> 0	Rockville, Maryland	
21	FREDRICK MULLEN , Sr. Claims Consultant, Paralyzed	
22	Veterans of America Washington, D. C.	
23	HUGH WALKUP (Alternate) WALTER PHILLIPS (substitute	
24	Department of Human Resources Disabled American Veterans Seattle, Washington Washington, D.C.	

#### 1 AGENDA 2 PAGE Call to Order and Opening Remarks by 3 Chairman, Dr. Barclay M. Shepard, M.D. 1 4 3 Old Business/Recent Activities 5 Update from American Medical Association 12 by John R. Beljan, M.D. 6 CDC Birth Defects Study 7 by Dr. Barclay Shepard, M.D. 17 8 State Government Activities by George R. Anderson, M.D. 9 23 VA Chloracne Task Force 10 44 by A. Betty Fischmann, M.D. 11 Retrospective Study of Dioxins and Furans in Adipose Tissue 12 54 by Joseph Carra 13 VA/AFIP Pathological Evaluation of Malignant Neoplasms in PTF 14 73 by Han K. Kang and Nelson S. Irey, M.D. 15 Reports of Subcommittees 79 by Fredrick Mullen, Sr. 16 85 by Richard A. Hodder, M.D. 17 Comments and Discussion 91,121 18 Follow-up Questions and Remarks/Observations in Australia and New Zealand 98 19 by John M. Levinson, M.D. 147 Adjournment 20 Appendix 21 148 22 Vu-graphs used by Dr. Kang 23 Minutes of Subcommittee Sessions 155 Epidemiology/Biostatistics 158 Veterans Education/Information 24 25 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

1330 VERMONT AVENUE, NW WASHINGTON, D.C. 20005

v

# CALL TO ORDER AND OPENING REMARKS

(8:35 a.m.)

DR. SHEPARD: Good morning, ladies and gentlemen. We will begin our meeting. As usual, we have a fairly full agenda, so I would like to get started.

are

We are delighted that not only/most of the members of the committee here this morning, a very dedicated group of individuals who have provided a tremendous amount of help to the VA in sorting through some of the intricacies of this complex problem and issue, but we are also very appreciative of guest speakers and members of the audience who have faithfully attended these meetings, and have from time-to-time asked probing questions, which we welcome.

We believe that it is part of our responsibilinformed ity to keep veterans and the general public /as to our activities.

We very much endorse the open-door policy, the open-window policy, if you will, and so we appreciate your attendance at these meetings.

This is the 20th quarterly meeting of the VA

Advisory Committee on Health-Related Effects of Herbicides,
since its establishment in April of 1979. It doesn't seem
possible we have been going that long.

Today's meeting will be open to the public, as usual, including subcommittee meetings. Please note that

the subcommittee meeting on epidemiology and biostatistics 2 will remain in this room, and the subcommittee on education and information will move to Room 139 at the appropriate 3 time in the agenda. In order to have a record of attendance, we ask 5 that all visitors make their presence known by signing 6 7 the log book in the entryway. We have set some time aside at the close of the R meeting, as has been our practice in the past, for questions 9 10 from the floor, 11 Please write down your 12 questions and give them to Don Rosenblum during the course 13 of the meeting, so that they may be presented in an 14 appropriate fashion at the appropriate time. 15 I would like to announce that Dr. Irving Brick 16 recently retired from the American Legion, ₩e 17 happy to announce that Dr. Thomas FitzGerald, a long-time 18 public servant with a distinguished career with the VA, 19 who has been acting as Dr. Brick's alternate on this 20 committee, has now become an official member of the 21 committee. We are very glad for that, Tom. 22 We certainly wish Dr. Brick well in his retire-23

ment, and hope that we can hear from him from time-to-time. We have tentatively scheduled our next meeting on

are very

NEAL R. GEOSS COURT REPORTERS AND TRANSCRIBERS 1330 VERMONT AVENUE, NW WASHINGTON, D.C. 2000\$

24

September 12th, which is a Wednesday, September 12th. It is a tentative date, we will inform you as we firm up that date, and of course, it will be published in the Federal Register, as usual.

You may be wondering about the lights and the TV camera, this is not a media event, at least not planned to be a media event, as has happened occasionally in the past. But the purpose of the camera today is to record portions of this meeting for possible use in the video tapes that the VA is producing

to update both veterans and VA staff personnel on the activities of this committee, and the progress of the whole Agent Orange issue.

OLD BUSINESS/RECENT ACTIVITIES

I would like to clarify a few points that have come up over the course of the last several meetings, just to clear up the record, in case there are some doubts in the minds of individuals who have been attending our meetings, as well as members of the committee.

The first point covers the issue of our bi-monthly conference calls. These regular conference calls allow the Central Office Staff, that is the Agent Orange Projects Office, and related staff members who are in the Central Office, and officials at various VA health care facilities to share information and concerns regarding various aspects of the Agent Orange issue. Typically, such calls include

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

timely announcements, formal presentations by Central Office staff, and a question and answer period.

When we see problems that seem to be system-wide, or questions, we utilize the conference call mechanism to eliminate or minimize such difficulties and to answer such questions. I hope that no one here will misinterpret the purpose of the calls.

Again, I want to commend our field facilities on the job that they have done during the past six years. We have had a few problems, but overall the services have been provided in an outstanding manner.

A point on the registry examination, there has been some confusion at some recent meetings regarding the initial and follow-up examinations. I want to clarify this matter. When a veteran first visits the VA medical center for an Agent Orange registry examination, he or she is asked a series of questions relating to possible exposure to herbicides in Vietnam. A medical history is taken, a physical examination is performed and base-line laboratory tests, such as X-rays, urinalysis, blood tests are obtained. Consultation with other physicians are requested, if the examining physician, in most cases the environmental physician, or a designated member of the staff, feels that such consultation is medically indicated.

This was the procedure in 1978, is the procedure

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

today, and has been in the intervening years. The examination is the same today as it was then, there have been no substantive changes in the way the examination has been performed, or the way the medical history has been taken.

Veterans who need follow-up examination will not necessarily receive the full comprehensive examination.

Veterans can receive only one initial examination, but can receive an unlimited number of follow-up examinations.

Data from the follow-up examinations are included in the computerized registry, but they are included as follow-up examinations.

So, in our monthly reports and in our statistical reports, we get the number of initial examinations, on the cumulative basis, and the number of follow-up examinations. So, we really receive two sets of numbers.

The process that has changed and evolved over the years is the method of coding the information from these examinations. But I just want to emphasize that the original purposes of establishing the registry are essentially no different today, than they were when the registry was first established, and the process is not very different, except in that the information is coded in a different manner. That is we have developed a new code sheet that we have referred to from time-to-time. But that does not suggest that either the purpose

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

of the registry process has changed, or that the process itself has changed significantly.

On the matter of the literature review, I am very pleased to report that the analysis and the annotated bibliography of recent literature on Health Effects of Herbicides was published by the VA in April. I hope most of the members of the committee have received their copies, it will be Volume 3 and Volume 4; Volume 3 being the critical analysis of the literature on herbicides and related compounds, and Volume 4 is the annotated bibliography.

You will note that there is a somewhat of a change in the format, and we hope this is a change for the better.

The bibliography is a much more succinct volume, and it is just that, a bibliography. But it has a coding system to indicate what areas that particular citation covers.

We feel that this is a good step, because it provides in a relatively short volume, the bibliography and the highlights of the contents of each of the items listed in the bibliograph. The major critical review, of course, Volume 3, is essentially the same as has been done in the first effort back in 1981.

For further information, see the flyer in your folder or the hand-out on the table. For those of you in

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

the audience who wish to obtain copies of the literature review and analysis, instructions on how to obtain those are provided.

In addition to the scientific review, we are developing a lay-language summary which was a recommendation of our education/information subcommittee. This has been completed, that is the first draft of it has been completed and is now undergoing editorial review to insure that the language is appropriate/the audience for whom it was designed. This is, as I said, a lay-language summary of the results of the scientific review and analysis.

Hopefully, those will be ready in the next month, or two, for distribution.

The monograph series. As you may recall, the committee has received presentations from each of our monograph authors, namely, Drs. Lavy, Hood, Sommers. Each of these monographs -- a draft of each of these monographs has been completed and has been reviewed for technical accuracy. They are currently being reviewed and edited.

The first monograph should be published in approximately three to four months; the others will be available later on this year, or early next year. A fourth monograph on chloracne is now getting underway after several unavoidable delays.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

(202) 234-4433

As mentioned at the last meeting, Mrs. Howard, of my staff, went on the first of her SERP / which is an acronym for Systematic External Review Program, a quality control program that has been ongoing in the VA for some-She made a visit to our VA Medical Center in West Haven, Connecticut, and she will be going on additional **Visits** visits in the future. Some of these/will be to large cities' facilities and stations with considerable Agent Orange activity.

Last month she also visited our VA Medical Center in Fayetteville, North Carolina, and will be going to a number of the medical centers, in addition to her SERP responsibilities.

I have visited Boston, Chicago and Denver for the purposes of acquainting myself on how various medical centers are handling the Agent Orange My reaction to those visits has been issue. very favorable. By and large, the VA medical centers are doing a very good job at handling the Agent Orange examination program.

Some of you, I guess the members of the committee, have been given these consent forms. The purpose of this, and please fill them out, is to obtain your consent to use the materials which are being videotaped

1	
1	for the purposes of the tapes that I indicated earlier.
2	So, if the members of the committee will please fill out
3	those before leaving.
4	We are happy to have the people who
5	are developing these videotapes with us this morning, and
6	later on in the program we will be hearing from Mr. Dan
7	Jones.
8	We have continued to cooperate with the Women's
9	Advisory Committee, Women's Veterans Advisory Committee,
10	and have provided that committee with updates regarding
11	our Agent Orange related activities.
12	Some of you will be aware of the fact that recentl
13	our office has been moved from this building to a nearby
14	building, namely the Shoreham Building, on the corner of
15	telephone 15th and H Streets. Our/number also has changed. We still
16	have an FTS number, but for those of you who need to keep
17	in touch with us, and have not been informed of this change
18	I would suggest you jot this number down. It is still
19	Area Code 202 and the
20	FTS number is, as is the commercial number, 376-7528. So,
21	those of you who want to get in touch with us, please be
22	aware that we now have a new telephone number.
23	My deputy, Dr. Lawrence Hobson, is still across

My deputy, Dr. Lawrence Hobson, is still across the street, immediately across the street, and his number has not changed, it is FTS or (202) 389-5534.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

24

I am sure that many of you have heard about the ongoing litigation, there may be some questions in your minds concerning this. This is a matter, really, between the Justice Department and the courts in New York, and my/ have refrained from getting ourselves involved, to the extent that we have been able to, from the details of the litigation.

But I am sure that those of you reading the papers and listening to TV will have noted that a settlement has been proposed in New York. It is my understanding that the judge will conduct a series of hearings, not only in New York, but around the country, for the purpose of determining the reaction and appropriateness of the settlement question.

We have received a number of calls from veterans concerning the status of their position, with regards to the class action suit, and particularly as members of the class.

I think this is because some veterans have been under the impression that somehow there is a connection between being in the Agent Orange registry and being in the class.

I just want to make it clear here, as I have tried to make it clear to the veterans who have called us on this issue, that there is no real connection between the Agent Orange registry, or being in the registry and being in the

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

There was a point in time in which the court re-1 class. quested names and addresses of individuals on the registry, 2 3 because that is among the larger of registries of Vietnam veterans who certainly are concerned about Agent Orange. It was a means of getting in touch with these individuals. 5 The court did request names and addresses of individuals on 6 the registry. And it is my recollection that they mailed 7 out a letter to these individuals, simply pointing out 8 9 their opportunity for opting out of the class, if they did not choose to remain in the class. 10

To the best of my knowledge, that is the only connection between the registry and the court action that is going on in New York.

I just wanted to clarify that point.

Mr. Fred Conway, of our General Counsel's office, is here and may be willing to answer any questions later on, during the question and answer period, if there are those of you who want to address questions to him.

You may also have heard that last month, that is on the 22nd of May, the Senate approved H.R. 1961, after it was amended to include the text of S. 1651, as amended, the Veterans Dioxin and Radiation Exposure Compensation Standards Act. The purpose of the Senate passed legislation is to insure that VA disability compensation is provided to veterans who were exposed during service in

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

11

12

13

14

15

16

17

18

19

20

21

22

23

24

armed forces in the Republic of Vietnam to herbicides containing dioxin, or to inonizing radiation in connection with atmospheric, nuclear tests, or with the American occupation of Hiroshima or Nagasaki (and dependency and indemenity compensation is provided to survivors of such veterans) for all disabilities arising or subsequent to such service that are connected, based on sound scientific and medical evidence to such exposure; and for all deaths resulting from such disabilities.

Again, Mr. Conway and I wish to amplify, or answer questions regarding this recent piece of legislation passed by the Senate. It is my understanding that this will probably go to conference because of some differences between the House and Senate versions, but we will follow the course of that action with interest.

That concludes my opening remarks.

I would now like to call on Dr. John Beljan, representing the American Medical Association, Council on Scientific Affairs, who, as many of you know, has been involved in the Agent Orange issue for sometime now, and has been developing an update of analysis on that issue.

John, it is a pleasure to have you here this morning.

UPDATE FROM THE AMERICAN MEDICAL ASSOCIATION DR. BELJAN: Thank you, Dr. Shepard.

I noticed that Dr. Shepard gave me 15 minutes on

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW

the program, and I think that is related to my private life as a Dean of Medicine. I do not intend to speak that long, sir.

I would like to bring you up-to-date on the report that is in process from the American Medical Association. You will recall that in 1980 and '81, the Council on Scientific Affairs of the American Medical Association was asked by its constituency to develop a paper summarizing at that time the medical effects of Agent Orange. That was subsequently published in a document that has been widely circulated in 1982. It/subsequently Medical Association published in an abbreviated form in the Journal of the American/as as a result of that investigation of 1981 - 1982.

You will also recall that the Missouri Delegation requested that the report be updated following some of the publicity related to the Times Beach affair, and concerns of practicing physicians, particularly in Missouri.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

dioxin/Agent Orange studies.

We are currently in the process of developing the first draft of our revised report. We will be meeting at the end of this month, in camera, as a full panel to further debate and/revise the first draft. Our intent is to have a paper completed in time for the fall meeting of the Council on Scientific Affairs, and trust that the report subsequently will be/adopted at the December meeting of our House of Delegates.

I think it is fair to say that we do not see any major alterations at this time from the conclusions of our previous report, but one can always be editing. surprised in the process of discussion, drafting, and/ However, we believe that the report will be out in December and will become public information at that time. And our bottom line will be that we do not believe that it will contain any surprises.

DR. SHEPARD: Thank you very much, Dr. Beljan.

Are there any questions from members of the

committee to Dr. Beljan?

(No response.)

DR. SHEPARD: I know from personal experience, he has done a very thorough job, he and his committee.

I was privileged to present material updating the VA's activity in this area at a meeting that he held at his

committee in Chicago several months ago, and I know that he 1 has called on a number of experts in the field since that 2 So, I have the strong sense that Dr. Beljan and his 3 committee have done a very thorough job in preparing this 4 report, that has left no stones unturned, I believe, in 5 terms of achieving additional information. 6 Yes, Dr. Barnes? 7 DR. BARNES: I was wondering whether I might ask 8 whether or not you have included in your examination of 9 2,4-D in this document? 10 DR. BELJAN: Not in depth, no. It is primary a 11 dioxin paper. 12 DR. BARNES: Are you broadening the scope to 13 deal with dioxin and herbicides? 14 DR. BELJAN: No, we have tried to maintain our 15 frame of reference to dioxin. It all started out as 16 Agent Orange and then dioxin, and we have tried to contain 17 this, because as you know, one can keep opening many, many 18 develop doors. We wanted to / a report directed at this 19 particular agent, and in some kind of timely way. We 20 our report thus came out believe \_ / timely; our membership probably does not. 21 MR. WALKUP: Doctor, in previous editions of your 22 report you gone to some length talking about the effects 23 of tobacco and alcohol, as well as Agent Orange and dioxin, 24 in your revised edition there are a number of places where 25

1	things had not been updated and there were still references
2	to studies that were as of 1981, which were then completed
3	by 1982 or 1983.
4	What sorts of things are you doing to insure that
5	the quality of the next report is better than the last
6	two?
7	DR. BELJAN: Our intent, of course, is where
8	studies have been completed, to include them in the report,
9	and to weave in those things that have been related in
10	prior reports into our current work.
11	MR. WALKUP: I guess I was asking more specifically
12	what sorts of areas have you identified that have created
13	some of the criticisms that came with the previous reports,
14	and what have you done to correct those problem areas?
15	DR. BELJAN: Those that have come to our attention
16	have certainly been addressed and have been updated. If
17	there are other concerns about the report of which we
18	are unaware, we would be grateful to have them. There have
19	been criticisms of any report, and we recognize that, how-
<b>2</b> 0	ever, where there has been/in print, or elsewhere, that
21	criticism has been addressed. Wheater
22	We have Mr. in the audience, who is our
23	staff officer for this report. Bob, do you have anything
24	further to add to that question?
25	MR. Wheater: The only major objection that we

problems and essentially are proceeding on the same basis?

DR. BELJAN: I think that is a fair assessment,

DR. SHEPARD: I haven't discussed this, Dr. Beljan, but if it would be helpful, or useful in your view, I am sure the members of the committee would be happy to review the manuscript with that in mind, if you think that would be helpful. I just throw that out as an offering to the committee, I trust the committee members would be willing to do that, if that would be helpful to you.

DR. BELJAN: Thank you.

DR. SHEPARD: Any other questions for Dr. Beljan? (No response.)

DR. SHEPARD: Thank you very much.
CDC BIRTH DEFECTS STUDY

The next item on the agenda was to have been a presentation by Dr. Joseph Mulinare, who is working on the CDC Birth Defects Study. Unfortunately, there has been a health problem in Dr. Mulinare's family, and he is unable

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

yes.

to be with us this morning.

I had a good conversation with him yesterday, and also with Dr. David Erickson, who initiated the Birth Defects Study, as you will recall. We are very sorry that Dr. Mulinare čan't be with us this morning, but I think I can summarize the status of that very important study. It is essentially as follows: The study has been completed, the data has been collected, has been analyzed and the report has been prepared.

The results of this study will be presented in two fashions: first of all, it will be submitted as a medical journal item to a medical journal. It will appear in a medical journal as a scientific report. Obviously, such journal articles do not contain all the data, or all of the methods, or the intricacies of the study, and so forth, that is a much more complete document.

So, in addition to the article in a medical journal, there will be a detailed report issued by CDC, analogous, I suspect, to the Ranch Hand Report which was a voluminous report on all the details of how the study was conducted, the data that was gathered, the method of analysis, some of the analytical results -- much more than would appear in a normal journal article.

As part of the review process, the manuscript and the report were submitted to the Agent Orange Working Group,

2 3

for review and in turn submitted to the special advisory committee that was established by the Chair of the Agent Orange Working Group, for the purpose of reviewing and monitoring such research efforts.

This is the same committee that reviewed the Ranch Hand Study. As you many recall, Dr. Moore was the Chairman of that committee for most of the time that it was acting as an oversight committee for the Ranch Hand Study. With Dr. Moore's new appointment to EPA, he resigned that chairmanship, and the new chairman of that committee is Dr. Robert Miller, an epidemiologist at the National Cancer Institute.

Dr. Robert Miller's committee has reviewed the Birth Defects Study report, and has completed that process.

Now the manuscript of the article that will appear in a medical journal has been submitted to the Editorial Board of the Journal of the American Medical Association. They are currently reviewing the article, the report, and hopefully, will act upon it favorably, that is they will decide to include it as a journal article in JAMA.

Precisely when that occurs is difficult to predict at the moment, but we certainly hope that it will be within the next six weeks.

The detailed reference report that I mentioned,

1	the other form of the report, is also ready for publication
2	and by agreement with the editorial board of the JAMA,
3	assuming that they will agree to publish the article, the
4	detailed report from CDC will be published concurrently,
5	that is as close as can be predicted, the two reports will
6	appear at the same time.
7	We hope, as I say, that we will have the results
8	of this sometime in the next six weeks. It is a little
9	bit difficult to predict when you are dealing with an
10.	editorial board of a journal of the reputation of the
11	Journal of the American Medical Association, to know
12	exactly when the editorial board will agree on the content
13	of the article. As I say, I hope it will be sometime in
14	the next six weeks, or so.
15	I would be happy to answer any questions, if you
16	may have them.
17	Yes, Dr. FitzGerald?
18	DR. FITZGERALD: Barclay, is it your intent to
19	have copies of the CDC Report for the members of the
20	committee?
21	DR. SHEPARD: For sure, yes. You will see it,
22	however, no sooner than it appears in JAMA.
23	DR. FITZGERALD: I understand that.
24	DR. SHEPARD: We will certainly get copies of the
25	full report, I haven't seen

1	the report. It has been purposely conducted in this way,
2	I think, to minimize any opportunity for anybody influenc-
3	ing the contents. It has been a very carefully conducted
4	scientific piece of research and its publication as such
5	I believe has been in the appropriate fashion. Except
6	for the investigators themselves, I suspect that very
7	few people know the results of that study, and appropriatel
8	so, until it appears in the Journal.
9	DR. KAHN: Speaking of the reports, I don't think
10	we ever got copies of the Ranch Hand Study there was
11	a box around, but the box evaporated, and most of those
12	to all members of never got/the committee.
13	DR. SHEPARD: I certainly don't have a large
14	supply. I would suggest the people who want copies of the
15	Ranch Hand Study, who have not gotten them, submit that
16	request to the principal investigators in San Antonio.
17	We did not have a large number of reports. And
18	if that is a problem, please let me know, and we will see
19	what we can do about getting copies.
20	Did everybody on the committee get a copy?
21	(Affirmative reply.)
22	DR. SHEPARD: So, we did supply them to members
23	of the committee.
24	I, personally, feel that that is probably the
25	extent of our responsibility. We cannot, I think, take on

I	the responsibility of distributing copies of somebody else'
2	work to large groups of people. It was submitted, we did
3	make arrangements to have enough copies for us.
4	Any other questions on the CDC Birth Defects
5	Study?
6	MR. WALKUP: Is it correct then that the papers
7	you are speaking of have been reviewed by no one, except
8	within CDC, the Agent Orange Working Group, and the Board
9	of the American Medical Association who participated?
10	DR. SHEPARD: To the best of my knowledge, I know
11	that Dr. Erickson, from time-to-time, during the course of
12	the preparation of the protocol and other times has shared
13	the strategy of the study, the manner of the conduct of
14	the study with groups of veterans, and, of course, this
15	committee. It is a matter of public record again, and again
16	and again, Dr. Erickson and Dr. Mulinare have reported on
17	the study.
18	In terms of a critical review of the results of
19	the study, I believe that is correct. To my knowledge, no
<b>2</b> 0	other groups have reviewed it.
21	Any other questions or comments?
22	(No response.)
23	DR. SHEPARD: Thank you.
24	Next, I would like to call on Dr. George Anderson
25	to give us an update on the activities of our various
	NEAL R. GRÓSS

state Agent Orange Commissions.

## STATE GOVERNMENT ACTIVITIES

DR. ANDERSON: I come to you with a bit of a common cold, so with my raspy voice, and I am also suffering from seven hours of jet lag, I flew in yesterday from Helsinki.

Texans do things in a big way, I came to this meeting by way of San Francisco, Shanghi, Peking, Moscow, Lenigrad and Helsinki and New York. So, if I tend to wander, it is because I am not quite rested yet.

When I was contacted to present some information from the various states, either 21 or 23 programs, depending on definition, I sent out a memo and I have the results back from a number of the states, not all of them of course, since the programs are in various states of development and activity.

I thought what I might do is give a short summary from each one of the responses, and then end up discussing of a bit/what is happening in Texas, to close.

I received from Al Wendt, from the State of Iowa, a rather short report in which he wanted to be recognized at this meeting. He says they are continuing their activities and those are very much like those of many of the other states in which they, of course, develop a registry and get some basic data on the veterans within the

state, and then take it from there.

The public awareness program is moving along, they are getting a lot of cooperation from the media. They are sending out many news releases, radio and television public service announcements, even though their program is still quite new.

Eligible veterans are contacted by means of the survey exposure questionnaire which he sent me a copy, and they use a self-addressed stamped envelope to get it back. And this, of course, is always important, many of our veterans prefer this.

The information is collected, reviewed and the data transferred for analysis to their computer data bank.

They hope to have a final report on their first year activities shortly. It is questionable at this time whether consideration will be given for extending the program beyond the 30th of June of this year, because of funding constraints. He will continue to keep us informed.

The great State of Wisconsin, a letter from Donald Laurin, who is the field investigator. He states that they are developing their veterans health update, and they are hoping to get a cohort mortality study down the road. They have 58,260 Vietnam War veterans in the state, with 171,000 Vietnam Era veterans. They are going to study the groups together / proportionate mortality ratio

analysis.

Beyond that they are not extending their studies much further at this time. It is nice to know that they are active, in view of the fact that a year or two ago, we weren't sure if they were going to continue a program in Wisconsin.

The State of Kansas, we heard from Dr. Donald Wilcox. Although the Kansas statute pertaining to Veterans Agent Orange Assistance Program was initially identical to the one passed by Texas, the Kansas legislation amended it and thereby eliminated a requirement of the state to provide the veterans with fat tissue biopsies, genetic counseling and screening. In addition, the conduct of epidemiological studies was made elective, rather than a mandatory responsibility of the State Department of Health and Environment. And no funds have been appropriated for such a program during the past two years.

As a results, reports by veterans to this department of possible injuries subsequent to exposure to Agent Orange have been extremely meager, only 20 have been received, despite the fact that over 2,000 forms were distributed to veteran organizations and other groups throughout the state.

In summary, except for an annual report to the governor and legislature required by statute regarding the

current status of various scientific studies being conducted by the federal government on the effect of exposure to Agent Orange. The program is not highly successful in Kansas.

Without money, people just don't get things done, and we are all quite aware of that.

The State of Connecticut, Vietnam Herbicide

Information Commission, this is being done at the Veterans

Office of Southern Connecticut State University.

"Dear George, Reference your request" and so forth,
March 24th, '84, Vietnam Herbicide Information and Medical
Outreach Conference, and he attaches some brochures concerning their conference held in Connecticut.

On the same date, the Physician Hospital Reporting
System announced in Connecticut, and also attached are
their forms. As you know, their program is still very new,
just getting started.

On April 18th, the Agent Orange Registry List for Connecticut was received at the VA, over 800 medical questionnaires were sent to newly identified Vietnam veterans. On April 25th, the current figures on Connecticut Vietnam veterans who have completed medical questionnaires and May and June, articles are being written by medical subcommittees for two monthly publications in Connecticut. And the Commission meets every six weeks, funding for our

2

3

5

6

7

8 9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

third year has been approved by the Governor, for the same amount as this year, \$120,000.

That concludes the State of Connecticut.

The State of West Virginia, I believe Chuck Conroy is here today, but I will present what he gave to me. The usual opening, "Please find enclosed a brief update on our activities", they are attempting to get the kinks out of their program, and moving along more rapidly than I thought they would.

He had received a copy of our preliminary studies, of our pilot clinical studies. Todate the West Virginia Department of Health has received requests for medical testing for possible health-related effects of Agent Orange exposure from 4,221 state Vietnam veterans. This means that approximately 16 percent of West Virginia Vietnam veterans have requested these services. In order to register for medical testing services available under our program, the veteran simply completes and returns the postage paid portion of the enclosed brochure, which he attached copies. They have mailed out 27,000 of these so far in the state.

If the veteran objects to being tested by the VA, which is Phase I of our testing protocol. They so indicate on the card, and arrangements are made to have them tested in an alternate facility; todate only 84 veterans, or

approximately 2 percent of our responses, have refused to be tested by the VA.

Upon receipt of their request for testing, providing they have no objections, we arrange an appointment for them to receive an Agent Orange screening exam through the VA Medical Center closest to them. Our office arranged for over 1300 of these examinations over the past 18 months.

After receipt of the VA exam, we then forward the Veteran Consent Form enabling the VA to release copies of the examination results to the West Virginia Department of Health and a medical questionnaire to complete, additionally copies of medical records from private physicians, the veteran is visited.

Once we have received the veteran's medical records from the VA and their private physician, they have completed their medical questionnaire, we then forward these documents on to our Health Department Epidemiologist, she then assures that are required exams, lab work, X-rays and so forth have been performed and are included with the veteran's medical records.

After all of these medical records are gathered, they are abstracted by a health department epidemiologist, noting abnormal test results and so forth, and made a

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW

1 matter of record. They review the medical records, similar 2 to the way we do in Texas in our program, and build a file, which then is very useful. They have a complete packet. 3 We now have complete packets, meaning all relevant 5 medical records and medical questionnaires from 25 percent of our 4,000 veteran respondents, and hope to begin 6 7 schedulling appointments at state medical schools next В week. Perhaps they may have already done this, because 9 his letter was dated April 18th. 10 To encourage participation in the program, Governor 11 12 Rockefeller has recently issued an Executive Order granting administrative leave to all state employees who are Vietnam 13 veterans for the purpose of obtaining these examinations. 14 He also urged employers in the private sector to initiate 15 a similar leave policy for their employees. 16 They have also recently amended a mortality study 17 to determine how many West Virginian Vietnam veterans had 18 died since the conclusion of that war, the cause of death, 19 and so forth. 20 Finally, we are considering the feasibility of 21 conducting a birth defect study, similar to the one con-22 ducted by the State of Texas. 23 And that completes West Virginia. 24

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

Chuck is here, he can make any additions, if you

1 | would like, to his report.

7.

(202) 234-4433

DR. SHEPARD: I will recognize Chuck Conroy, if you have any additional comments to make.

MR. CONROY: Thank you, Dr. Shepard.

No, that's basically it, although we have commenced our testing now at our state medical facilities, we have todate closer to 2,000 of the 4500 that are in the memo, and we anticipate being able to test approximately 1800 veterans during our first year of testing.

We have received another fiscal appropriation from our legislature for \$200,000; we have also received roll over funds for the unexpended funds that we have this year. So, we are commencing our testing efforts with approximately \$400,000 in state monies. And we have received outstanding cooperation from the VA, in terms of obtaining these medical records that are referred to in the report to Dr. Anderson.

We have four VAs in the State of West Virginia, and from 'just the quantity of medical records we have been receiving from the VA, we know that there are people involved at the VA level that are just doing nothing but Xeroxing medical records for the State of West Virginia, and we certainly appreciate the cooperation we have received from the VA thus far.

DR. SHEPARD: Thank you very much, Chuck.

1	I was curious myself on the morality study, do
2	you have any feel for when that might be completed?
3	MR. CONROY: We have just commenced it now, I am
4	told by our computer people that it shouldn't take that
5	long because we do now have a master death tape that we
6	can bump against our 27,000, so they tell me it shouldn't
7	be more than a month, or so that we should have the results
8	of that.
9	DR. SHEPARD: You say you do have a master tape?
10	MR. CONROY: Yes, we do, it was just created last
11	July.
12	DR. SHEPARD: That should be very interesting.
13	Any questions oh, you are not through yet.
14	DR. ANDERSON: I am not done.
15	That was the extent of the states that responded
16	to my request. I note that there are other states repre-
17	sented at the meeting here, Terry Hertzler from Connecticut
18	is here, he may have something he may want to say.
19	MR. HERTZLER: We are Pennsylvania.
20	DR. ANDERSON: Oh, Pennsylvania, I'm sorry.
21	MR. HERTZLER: Briefly, I apologize for not
22	replying to Dr. Anderson, but we have been very busy lately,
23	trying to get an extension on our program. Legislatively,
24	there are currently two bills in Pennsylvania to extend
25	this, one for two years, and one for three years. Our

primary goal is establishing a registry of Pennsylvania

Vietnam veterans, which we expect, hopefully, will include

the 200,000 veterans in Pennsylvania. This will be accomplished by survey questionnaires scheduled to go out

in October of this year.

The Governor has done some TV PSAs for us and informational so far we have distributed 250,000 brochures. We expect to get another 50,000 out in the next couple of weeks. The primary thing that we have just finished, has been an educational program for physicians in the Commonwealth of Pennsylvania. We held two seminars late last year in which we had attendance from some of the physicians in Pennsylvania's various medical functions.

We just got from the printer's two weeks ago a manual we have been working on, which will be mailed this week to physicians in Pennslyvania. Our primary mailing is going to be about 9400 general practitioners, family practice, internists and osteopaths in the Commonwealth which will give them a background of the Agent Orange problem, because we seem to get a feedback from some of the veterans that due to their problems that they may have encountered at the VA, or heard about the VA, have gone to their own family doctors for some treatment and some of the doctors are not familiar with the problem.

So, we have developed this manual, I have a limited

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

1 amount of copies here which I will give the Chairman at the 2 break to distribute to the committee members, and then 3 additional ones to different state commissions. 4 DR. SHEPARD: Thank you very much. 5 DR. ANDERSON: I think Jerry Bender from Minnesota is here. 6 7 MR. BENDER: Thank you. 8 The State of Minnesota, within a couple of weeks 9 will have a mailing to veterans. You will recall, four years ago we had a major (inaudible). What we have done 10 now is run a cross-index between the most recent tax list 11 12 on the State of Minnesota and our computerized list of 57,000 veterans. We will be sending out current informa-13 tion to these people. We hope to do this on an annual 14 basis. 15 As for those veterans on our old 1973 list, who 16 don't appear on there now, we hope to have some cooperation 17 from the Veterans Administration and the Internal Revenue 18 Service, so we can get a current address on these people. 19 20 What I intended on doing was setting up a system in Minnesota that will accommodate the veterans for the next 21 half dozen years, until Minnesota has completed its control 22 study. 23

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

with noted scientists and medical people from the University

What we have done is set up a scientific panel

24

of Minnesota, the Department of Health, and also Mayo Clinic we can use these people for the local source for the 2 analyses to study these people. 3 More importantly, we have been training people, 4 or had an ongoing effort to train the County Veteran 5 Service Office in the State of Minnesota, there is one in 6 each county, they serve as local contacts in a number of 7 I think we have a very well trained network for areas. 8 about 100 or so people throughout the state who are familiar 9 with the basic issues on Agent Orange, and also with some 10 of the latest updates. 11 I think basically what we have done in the last 12 couple of years is set up a system that is going to work 13 very well. 14 DR. SHEPARD: Thank you very much. 15 I would be pleased to welcome any other repre-16 sentatives of the state Agent Orange commissions at this 17 time. 18 DR. KAHN: Peter Kahn. I am from New Jersey. 19 Our project for the death rate study is moving along rather 20 slowly. We have the disadvantage not having been a bonus 21 state, so cross-checking from the master tape has been a 22 real problem. 23

A second project to look at the possibility of a study of soft tissue sarcoma is also still being looked

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
V/ASHINGTON, D.C. 20005

24

25

nno: 994,489**3** 

1	at for feasibility. We don't know if we have the numbers
2	to do it.
3	The project that I mentioned here sometime ago
4	of an attempt to find out whether a small number of
5	have dioxin in their blood heavily exposed men/at levels exceeding those in appropriat
6	controls is now in case selection, and we should be
7	putting our first men in the hospital for medical testing/
8	Our outreach operations continue at a fairly
9	high rate. We have held, for example, in the last couple
10	of weeks, a series of hearings around the state to gather
11	information for the Commission from Vietnam veterans about
12	the proposed settlement of the class action suit. This
13	information will be transmitted to the court, since
14	obviously 89,000 vets in New Jersey can't go there.
15	That about does it. If anyone has any questions,
16	you can see me after the meeting.
17	DR. SHEPARD: Any other state Agent Orange
18	Commission representatives here that would like to be
19	recognized?
20	(No response.)
21	DR. SHEPARD: If not, thank you oh, are you
22	going to tell us about Texas?
:3	DR. ANDERSON: I will tell you about Texas.
4	DR. SHEPARD: Leave the best to the last.
25	DR. ANDERSON: It is not that I am a gentleman, I

just like to let everybody else come first.

2

1

3

4

5 6

7

8

9

10 11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Our program is undergoing a slight amount of modification. Our Advisory Committee, which was established under the amended law in our last legislature met for the first time in March of this year. We, of course, in our first meeting like that, you don't get an awful lot done, mostly meeting the other people and getting them familiar with the program, up-to-date.

Fortunately, at that time Dr. Guy Newell, who is chairman of that committee, and also heads the University of Texas System Committee on Agent Orange, did have a report. And I think he sent copies of that report to you, Dr. Shepard, covering our studies todate, our pilot studies.

Our sperm study has shown nothing and we are in the process now of dropping that particular study. were looking for Y-bodies, using florescent microscope techniques, but it didn't show anything. We had, of course, controls and we just didn't find anything.

The study, birth defects study in Dallas, has been a difficult story, because we did not go retrospective, we made a prospective study. We have now reached the point at which the Vietnam veterans are not reproducing themselves. much anymore, they are reaching that 40-year group, and we feel that their productive years of children are in the

past, and we are now looking at the possibility of a retrospective study of going back and seeing if we can't locate the children.

The study on the cytogenetics we are continuing into our next year. Our fiscal year is the 1st of September, which means that come the 1st of September we will have revised protocols and will write new contracts for those studies. We will continue with the cytogenetics, it is very equivocal at this time as to whether or not we have found much. But knowing the mutagenic potential of dioxin, we did not want to drop that particular study. So, we are continuing it. We have tested 69 veterans with 50 controls todate in that study.

The immunological profile studies are showing us something we didn't expect. As you know, each university system develops their own controls for their particular procedures, and they have in the University of Texas, of course, used staff and students of the university primarily to establish their controls, and they use them against patients in the hospital as methodology controls.

We found that our matched controls in our studies, which of course were matched to age, to occupation, and several other factors, except for one thing, they did not serve in Vietnam. We had coded to the extent that the researchers at the University of Texas did not know the

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

veterans from our controls. We had 69 veterans and 50 controls in the study at the point in time when we broke the code. We had 13 individuals who had abnormal T-cells, in other words low active T-cell counts and a few other factors which were very questionable, primary in the total T-cell count and the active T-cell count, subset. We did not know who these were, amazingly when we broke the code all 13 were veterans, which meant that we had a significant finding.

Now, the problems we have is going back and sorting through at this point in time to eliminate all of the variables that we possibly can, to see how significant our data on this is. We will continue that study in the next fiscal year. We are not saying that we have a positive finding, since it is a pilot study. It is giving us direction to go, so we will be continuing that study and possibly adding some other parameters to it.

The problem now in adding other parameters is we must go back to the 69 original, plus the 50 controls and all new controls that we select, and add these particular parameters.

As you know, we dropped our mortality study two years ago, when we found that it was not showing any significance as to the cause of death, compared to anyone else.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1230 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

ì

We did not get going in the dioxin analysis of fatty tissues for several reasons, one reason was that we felt that we would not go after any individual, unless we found some other clinical indications, such as laboratory findings, which would indicate that he had an exposure of in a chronic nature/which he might still have residuals in his fatty tissues.

We have collected only one sample of fat from a veteran, and that is from a deceased Navy veteran, who died from cancer in San Antonio. We have not analyzed that specimen because on analysis of his risk factor we determined that he was not at high risk from exposure to start with.

As we go into revising our protocols, we are now looking at some enzyme studies, liver enzyme studies of various types, and thinking of adding some subsets of T-cells. We are going to change our birth defects study and try to make it retrospective, if possible. And add one or two other parameters, if it looks like it might show us something.

We are still funded close to \$300,000 a year, we are now working on our next budget for the following two years. We have/bi-annual budget. And it looks good, our legislature and many of the members are still supportive of our program. It would appear that we will be funded for

two years, beyond our current funding, which does not expire until September of next year. It still looks good for three more years of study.

The Department of Health is charged with an epidemiological study, separate from the studies which the University of Texas system are carrying out. We have collected data now on nearly 600 veterans, medical data and complete files. We have 1600 veterans in our program, which means that we still have 1,000 more to put into the system, collect the data. It takes anywhere from six months to a year to develop a file on a veteran, so that we can then at that point decide whether or not we will put him into our clinical studies.

We hope to add at least 175 more during the next year into our studies. At the present time we have 99 veterans selected for study, of which I believe some 85 have already had the specimens drawn and submitted to the laboratory. The biggest problem we have, and an area which we will probably receive a considerable amount of criticism is in the selection of our controls. It is a very difficult thing to do and those of you who have done research and used controls know exactly what I am talking about.

That concludes my report. I am open for questions.

DR. SHEPARD: Thank you very much.

1	Do any members of the committee have questions
2	from Dr. Anderson?
3	DR. BARNES: Dr. Anderson, when you were referring
4	to the immunological studies that you had done at different
5	universities, was there implication to what you said that
6	there was variation between the controls of the different
7	groups?
8	DR. ANDERSON: I understand your question, the
9	T-cell studies were all done in the same university, by
10	the same group, and the controls were all selected by the
11	same committee and were geographically distributed around
12	the state / the areas from which the veterans came. So,
13	we tried to eliminate as many variables as we could.
14	gotten We have not / a mix of laboratories nor indivi-
15	duals in the program. The ones that started will continue
16	straight through to the end.
17	DR. SHEPARD: Are there any other questions for
18	Dr. Anderson?
19	MR. WALKUP: Doctor, I would like to beat a dead
20	horse with you for just a minute, if I can. Do any of the
21	states receive funds from the Veterans Administration, or
22	any other agency of the federal government?
23	DR. ANDERSON: Not to my knowledge. I don't
24	believe any of them have.
25	MR. WALKUP: Do you feel, or for what reasons do

you think it is appropriate that the states have activities working with veterans on Agent Orange, to what extent is that a state or local responsibility, as opposed to a federal responsibility? And why have states taken that on?

DR. ANDERSON: Of course, I am not in the political scene in our state, I am with the State Health Department, and I tend to want to stay out of the political side of it.

As to whether or not -- and I can only speak for Texas, our legislature prefers to set up a state program, or not, is in response from pressures from the various organizations within the state, not from the Health Department, or the scientific communities. We are only responding to a law which was put into effect in response to veterans.

We are, by law, advocates of the veterans, we have set up our program as an assistance program to the veteran. Our job is to assist the veteran in filing his claim and so forth, consistent with the law.

DR. SHEPARD: Any other questions of Dr. Anderson?

I have one question, Dr. Anderson. I think I heard you say, correct me, if I am misquoting you, that you are undertaking a mortality study, which you discontinued because it wasn't showing anything. I am wondering why you did that, it seems to me it is important to conduct studies, irrespective of what they show, in order to determine if anything is coming forward. Maybe I didn't

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

understand you correctly, please correct me, if I am misinterpreting what you said.

DR. ANDERSON: Most studies of this nature, when they are epidemiological studies, start out with a mortality study, to take a look at those that have gone on before the mortality to see what happened. So we have /tapes of course, in our department, and we pull them out and we check the cause of death of veterans, starting in 1967, '67 or '69. And we could go up through 1979. So, we took about a 10-year span and we ran them through and we found that these veterans compared favorably with the total deaths of comparable males, same ages and so forth, in our state statistics which we had already done in conjunction with the Department of Public Safety.

They died from the same causes, mostly automobile accidents, homicide, suicide and the usual cause of death among 20-year old people. At the same time we realized that in the State of Texas they had revised the death certificate in 1979, and had left off the veteran identifier as to the war in which he served. So, we now lost an identifier which made it difficult for us to pull veterans out, since 1979.

So, with those two problems facing us, we dropped the study at that point in time. It cost us \$5,000 just to run the tapes to find that out. We just felt we had

other places we wanted to put our money.

8.

DR. SHEPARD: Thank you very much, Dr. Anderson, for your very complete report. It was very helpful.

I would now like to call on Dr. Betty Fischmann, who heads up our Chloracne Task Force. Dr. Fischmann, as you know is the Chief of Dermatology at our VA Medical Center here in Washington, and has been working very hard on this whole issue.

Dr. Fischmann. VA CHLORACNE TASK FORCE

DR. FISCHMANN: Dr. Shepard, Advisory Group, members, ladies and gentlemen.

In July 1982, the Veterans Administration Chief Medical Director, Dr. Custis, reinstituted the Chloracne Task Force, or CTF. The CTF consists of a chairperson, and six members. All are prominent dermatologists, and include internationally recognized authorities on acne, dermatohistopathology and dioxin research. In addition, the CTF has sought advice from American and European chloracne experts.

Dr. Custis gave the Task Force seven objectives: one, formation of a network of dermatology consultants to the CTF in the 172 VA medical centers throughout the country; two, establishment of a group of nationally known private clinics, non-VA affiliated, to offer special examinations to any veteran on the Agent Orange Registry

where chloracne was suspected. three, establishment of chloracne diagnostic criteria; four, to update dermatology consultations in the Agent Orange Registry examinations; five, to report on the types of skin problems in the Republic of Vietnam veterans on the Agent Orange Registry; six, to continue medical education for CTF dermatology consultants; seven, to act as a source of information for authors of the chloracne monograph. The CTF has made significant progress as follows: The nationwide network of CTF dermatology consultants has been established, there is one in each of the 172 medical centers, except those where no dermatologist is available. In the latter centers, the environmental physician is appointed. Key reprints on chloracne,

Contracts have been established with non-VAaffiliated nationally prominent medical clinics over the
USA for special examinations of Republic of Vietnam
veterans whose skin problems are chloracne or possible
chloracne. Those veterans are offered in-depth physical
examinations, environmental studies and laboratory examinations.

systemic effects of dioxin toxicity in humans and lists

of chloracnegens are forwarded to each consultant.

To-date 17 veterans have accepted these special examinations. Transport, accommodation and medical costs

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

are funded by the VA Agent Orange Project Office.

No definite case of chloracne has been diagnosed.

However, in threecases, the possibility that severe cystic acne in service was related to dioxin exposure in Agent

Orange could be neither excluded, nor implicated. Copies of the special examination reports are forwarded to each to veteran, the environmental physician of the Veteran's center for inclusion in the Agent Orange Registry, to the veteran's private physician, if he has one, and to the Chief of the VA Compensation and Benefit Department.

A new format for dermatology examinations for the Agent Orange Registry is nearing completion.

The bibliographies on Chloracne and Dioxin, "Review of Literature on Herbicides, Including Phenoxy
Herbicides and Associated Dioxin" Volumes III and IV,
have been forwarded to the confirmed authors of the
Monograph on Chloracne; also instructions to the authors.

A report on skin diseases found in the Agent

Orange Registry has been completed at the Washington, D. C.

Medical Center. Among 909 veterans, 179 had skin problems,

there were five histories of acute contact dermatitis cases

from sprays thought to be Agent Orange. There was one

case of chloracne in a bulldozer operator / recently

sprayed and burned foliage and recently sprayed soil.

The commonest skin problems were fungal infections

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW

56; acute(11) and chronic(45) dermatitis; acne vulgaris
22; cysts, 18; acneiform dermatitis, 10; and eczema, 11.
There were up to three cases each of many common and some rarer skin diseases.

Benign skin tumors were five lipoma and two other tumors. Skin malignancies were five basal cell epitheliomas, one squamous cell epithelioma; one melanoma; and one cutaneous T-cell lymphoma; a total of eight cutaneous malignancies.

Since the first 909 Agent Orange registrants, there have been an additional two cases of chloracne, one case of porphyria cutanea tarda and two cases of chloracne from California. In addition, in the whole VA, there are 17 cases of service-connected chloracne; of these one is a case from the VA Medical Center and the remaining sixteen are being collected for review by the Chloracne Task Force.

In summary, at this time there are eight cases of chloracne where dioxin exposure in the Républic of Vietnam or to chemicals in a service research center in the US, can neither be implicated, nor excluded. There are an additional 16 cases to be reviewed by the CTF.

The CTF has established criteria for the diagnosis of chloracne. These criteria were mailed to the CTF consultants in the 172 centers on September 1, 1983.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 2000S

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

24

25

Recently there have been two new findings, first the Ranch Hand II Study has shown a statistically significant increase in skin cancers, predominantly basal cell epitheliomas, in the Ranch Handers. This finding has not yet been corrected for sun exposure, the usual cause of basal cell carcinomas. While awaiting this further analysis, the CTF will advise the field consultants to do thorough checks for skin cancers on Agent Orange registrants.

Secondly, in the National Cancer Institute

cutaneous T-cell Lymphoma Study, there are seven partici
pants who are Republic of Vietnam veterans. The significance,

if any, of this cluster of cutaneous lymphoma is not known

at present.

Recently, the VA Medical Center in D. C.,

the Agent Orange Registry was thoroughly reviewed by the General Accounting Office. They expressed concern about follow-up on the registry. In the Dermatology Section they were unable to locate two skin biopsies which during had been requested / the Agent Orange exam. We were able to verify that these biopsies had been done and appropriate therapy instituted.

The Chairperson had two days of deposition for the Agent Orange Class Action. Again, questions by the lawyers made it clear that there is concern about follow-up procedures for health problems found in the Agent Orange

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW

examinations in the country.

The CTF meets bi-annually, there have been four meetings, the last in May 1984. The CTF decided to again stress to the Agent Orange Projects Office its strong recommendation that the records of veterans on the Agent Orange Registry prior to October 1980, when chloracne was coded for the data base, that these records be analyzed by contract. It is important any cases of chloracne be located, as these are the Republic of Vietnam veterans who have had systemic absorption of a toxin and whose health must be monitored for life.

DR. SHEPARD: Thank you very much, Dr. Fischmann.

Are there any questions from members of the committee of Dr. Fischmann?

Yes, Dr. Lingeman?

DR. LINGEMAN: Congratulations, Dr. Fischmann, on a very complete and interesting report.

My question concerns the procedure for reviewing, you said that when a case of possible chloracne is called to the attention of the Task Force, that these are reviewed by the Task Force. Can you tell us more details about what materials are used in this review, and how it is conducted?

DR. FISCHMANN: When a case is brought to our notice, we locate the medical center of the case, request

1 the Agent Orange Registry records, the patient's clinical 2 records, the service records and all of these are initially 3 reviewed. 4 On review it is sometimes clear that there is no 5 possibility that the case is chloracne. In that case, we 6 may go no further. 7 If there is a question in our mind, because often 8 there may not be a good description of the skin lesions, 9 sometimes there will be just the diagnosis . we always request the medical center to recall the patient 10 11 to be seen by the Chloracne Task Force consultant derma-12 tologist, and to verify against the new criteria for 13 diagnosis the current diagnosis. We may, of course, request further things like 14 skin biopsies and more detailed histories of exposure or 15 16 subsequent exposure, et cetera. 17 DR. SHEPARD: Any other questions for Dr. Fischmanh? Yes, Dr. Barnes? 18 I must confess a little confusion DR. BARNES: 19 on the numbers, let me just see if I have them straight. 20 On page 2 you talk about that in the whole of the VA there 21 22 are 17 cases of service-connected chloracne, now that includes all veterans, not limited to Vietnam, is that 23

DR. FISCHMANN: That is correct, it is chloracne,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

24

25

correct?.

	(I
1	and at this point not having reviewed those, I am not sure,
2	I think they are all Vietnam veterans, but I am not quite
3	sure.
4	DR. BARNES: We recognize those as confirmed
5	diagnosės?
6	DR. FISCHMANN: No, we are about to check them
7	to confirm those diagnoses. These recently came to our
8	attention.
9	DR. BARNES: Okay. Then in the following para-
10	graph it says there are eight cases of chloracne, which
11	can either be implicated, in which dioxin can neither be
12	implicated nor excluded. Is that part of the 17?
13	DR. FISCHMANN: No, only one of those is part of veterans
14	the 17. The eight are all Republic of Vietnam/and have
15	had exposure to Agent Orange.
16	DR. SHEPARD: Any other questions of Dr. Fischmann?
17	DR. KAHN: Dr. Fischmann, is it the Task Force's
18	continuing belief that the systemic exposure that
19	chloracne is a necessary consequence of systemic exposure
20	only?
21	DR. FISCHMANN: The Chloracne Task Force believes
22	that in the instance of dioxin toxicity, not PCBs, for
23	instance, only in dioxin that chloracne is a necessary
24	finding to be able to say that some systemic problem is
25	related to exposure. In all of the literature there have

related to exposure.

only been two cases of laboratory workers who, two years

after they had worked with dioxin, when three people got chloracne

two years afterwards. Two of the workers (without chloracne) had systemic

problems. And this is the only instance in the record that I could find.

One would want to know what all the other exposures of those workers had been.

DR. SHEPARD: As you know, if I may just comment or add to that question, there is some block of consensus among dermatologists familiar with chloracne, or experts in the area of chloracne, as to whether or not the development of chloracne is a necessary hallmark of dioxin exposure. Some people feel very strongly that it is.

Dr. Kenneth Crow of England, for example, has spoken many times on this subject, and have written extensively on it and he believes that if you look at even very subtle changes, that this is the most sensitive indicator of systemic reaction to chloracnegens, I don't know that he has made the distinction between dioxin and other chloracnegens, but he certainly has made that statement. I think I am accurate in that reporting.

I don't think that is universally held opinion, however, so there is some controversy over that point.

And I don't know how that controversy would get cleared up,

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

1 | but it still is an open question.

DR. FISCHMANN: I would like to make perfectly clear one point, what is not known at this time is what low-grade, long-term exposure may do. Now, coming in that category could be birth defects, because doses much lower than those which can give experimental animals and humans toxic manifestations, doses much lower than those required for toxic manifestations may give you birth defects.

And the same thing with something like cancer, which is shown in the experimental animals, and is suggested in the work now in dioxin as a possibility.

So that one could not have chloracne and still have some long-term effect.

DR. SHEPARD: Yes, Dr. Hodder?

DR. HODDER: I am still not clear on the report, on the question you made. You have found 17 reported from service-connected chloracne, but you have not confirmed yourself? You have found reported 17 cases of chloracne, but you have not confirmed those?

DR. FISCHMANN: These are cases of veterans who applied for compensation, for a rating, for their skin problems and the rating examination stated they had chloracne, and the rating board has made these people service-connected. They are all currently service-connected for

1	chloracne, the 17. Of those, only one I am only
2	familiar with one, and we are currently collecting the
3	records from the other 16.
4	DR. HODDER: Did you confirm that one as chloracne
5	or
6	DR. FISCHMANN: Yes, that is the one from the VA
7	Medical Center.
8	DR. SHEPARD: Any other questions from members of
9	the committee?
10	(No response.)
11	DR. SHEPARD: Thank you very much, Dr. Fischmann,
12	for your report.
13	Next, I would like to call on Mr Joseph Carra,
14	from the Environmental Protection Agency, who will give us
15	an update on the status of our joint VA-EPA analysis of
16	Dioxin and Furans in Adipose Tissue.  RETROSPECTIVE STUDY OF DIOXINS AND FURANS IN ADIPOSE TISSUES
17	MR. CARRA: Good morning.
18	As Dr. Shepard mentioned, this is a joint study,
19	a collaborative study between the Veterans Administration
20	and the Environmental Protection Agency. Basically, the
21	way this study started was that
22	the Veterans
23	Administration is trying to take advantage of specimens
24	that have been collected by the EPA for many years, since
25	1970, adipose tissue specimens that the EPA has collected,

and in a number of these we still have archives of some of the specimens.

And I will go through that in a minute. So, the idea is for us to take advantage of the large number of specimens that the EPA has on-hand, to determine what the background levels of dioxin are in adipose tissue collected from the general population, and then to compare that to the adipose of specimens that we have from Vietnam veterans. And then to analyze the results of that, to assess the potential differences and factors that are associated with the differences, other than veteran status.

The mechanism that we are going to be using for this is the National Human Adipose Tissue Survey, or NHATS for short. This is a national network that has a statistical basis for it, at least in the initial stages of the design. And it is designed to get a statistically sound estimate of residues in human adipose tissues, residues of selected chemicals and pesticides.

About 1,000 specimens, adipose specimens, are collected annually for the EPA by medical examiners and pathologists in selected standard metropolitan statistical areas across the country, and they are sent then to EPA for chemical analysis. Those specimens for which we have remaining material, we archive, we store the specimens.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1230 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

ĸ

EPA has operated the adipose tissue network since 1970, and we have been archieving the specimens remaining after analyses for future work, as I mentioned before.

Because this is something that we have been doing since 1970, and we continue to do to this day, what I am going to be talking about is taking advantage of the archives specimens, but it should also be kept in mind that this network also has the potential for being used for prospective analyses, as well.

And we would want to see how this retrospective analysis goes before we would even entertain the idea of using it for prospective work.

As I said before, there is a statistical basis

to the adipose tissue network, and I will just

go over it quickly, so you will understand where these

specimens come from. We have stratified the country into

nine geographic areas, coinciding with nine census divisions.

We then have selected, on a statistical basis from two to

seven SMSAs, Standard Metropolitan Statistical Areas, from

each census division for a total of about 40, what we call

primary sampling units.

From each of these primary sampling units we select one or more hospitals, or medical examiners from each of these SMSAs and then we give the hospital pathologists who are cooperating with this network, or the medical

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

examiners, information on the specimens -- the kinds of specimens that we would like to have from each of them.

And that is based on census information, demographic information. So, we ask for specific age, sex, and race distributions from each of these participants.

The adipose tissue we get from the pathologists and medical examiners, for the most part, I think between 70 and 80 percent, are from cadavers, the remaining are from surgical patients. There are detailed protocols as to what -- as I said, demographic characteristics of the specimens we would like from each participant, but also we specify how we would want the tissue supplied to us, how it is to be sent. And we also indicate to the pathologist and medical examiners that we prefer things like traumatic deaths, so we don't have problems in interpreting some of the information.

Remember now, the purpose of the EPA network has been to get a handle on the general population over the years, and to track trends of pesticides and other chemicals in the general population.

The activities that have been going on with respect to this study have come in three basic parts. One is method development, that is chemical method development.

We have worked on developing a suitable method for analyzing dioxins and furans in adipose tissue, in the lower parts

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

per trillion range. I will get into a little more detail on that in a moment.

The information retrival area, a big effort here is to determine the veteran status of the contributors of the archived samples. And this is something, again, in I will get into/a little more detail.

And the third area, study design, is to see whether we would be able to have adequate sample sizes to be able to look at differences between Vietnam veterans and tissue from other than

Vietnam veterans,

We have proposed, the EPA and another branch in EPA that I work with, has proposed an analytical method for the analysis of adipose tissue. It was initially planned only to analyze for 2,3,7,8-TCDD, but in meetings of experts to review the protocol, the experts recommended that protocols be expanded to include the other dioxins and furans.

The method would use high resolution capillary gas chromatography, mass spectrometry and selected ion monitoring techniques, for those of you who are familiar with the chemistry. It allows for both low resolution mass spec and high resolution mass spec, depending upon the particular laboratory instrumentation that would be available.

We feel very strongly that this method would have

to be evaluated, the proposed method is only a method on

-- basically, a method on paper that has been tested, pre
liminarily in the laboratory where this initial prooriginated,

posal/ a contract laboratory to EPA. So, we feel that the

method has to be evaluated by an intra-laboratory ruggedness testing, intra-laboratory validation study, preferably

following the AOAC methods for doing ruggedness testing

and validation.

In the information retrival area, the data base that we were working with, the EPA adipose tissue file, contains 21,000 records. These are just the records now, with the laboratory information, birth date of the person No from whom the specimen came, the sex and race. Aname or social security number was ever collected in this file because there was no need. Pased on the initial purpose of the adipose tissue network, we did not have names or social security numbers.

We also have an archives inventory. So, of the 21,000 records we have found that we have 8,000 specimens. So, the first limiting factor is that we only have 8,000 for specimens of the original 21,000, and that is because/some of the specimens there was no material left after the initial analyses that were done on a routine basis.

We have institution codes with those archive inventory records. We have patient ID numbers that are

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

unique to this EPA adipose tissue network collection. And we have patient initials and we have specimen collection dates.

So, the problem we confront, first of all, is in order to identify whether the specimens come from Vietnam veterans or not, we need some identifier, other than simply a patient ID number that is unique to this study. We need something like a social security number, or a name.

So our approach has been to, first of all, look through our files, being that we do have the birth date, and to find potential Vietnam veterans; and what we are looking for is, in this study, males, born between 1937 and 1952. So, we looked first to see what archived specimens we had that came from males born between those dates. That is our potential Vietnam veteran pool.

Then we went and contacted the institutions from /
we got these specimens originally to obtain the
social security numbers, or lacking social security numbers,
to
obtain names, so that we could then get social security
numbers.

whom

And then we would check these against Veterans

Administration and former DOD files, that I think now

reside with the GSA, records to determine Vietnam service.

So that is the basic approach of collecting the specimens

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

and categorizing them as to whether they were Vietnam -- specimens from Vietnam veterans, or not.

What we then wanted to do was get an idea, as I said before, as to whether we would -- what kind of a sample-size we would have out of this, and what we would be able to do with that sample size -- would it give us any information, what would be the limits that we could go with the sample size we would have.

So, we looked at some simple analyses that could be done, in order to assess the design limitations that we had. One basic thing we could do was compare, obviously, Vietnam veterans to non-Vietnam -- to those who were not Vietnam veterans. We wanted to see how many we thought we could get of the Vietnams, how many of the specimens would be Vietnam veterans, how many of the specimens we would have remaining and try to get as much of the social security information from the institutions as we could, to get an adequate sample size.

The basic design we were looking at to assess

sample size was to say that we would take each Vietnam

veteran, and we would match a veteran with at least one

Vietnam Era male that was not a Vietnam veteran, based on

age and possibly race. Of course, multiple matching is

is

probably going to be possible; that/we would be able to

have for every

Vietnam veteran more than one, call

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

it control, for purposes of this discussion.

We would then analyze the dioxin levels from the specimens that we had in the archives, and then analyze the potential differences in the average dioxin levels of these two groups.

So, the question we posed for ourselves is what ratio of dioxin levels between the Vietnam veterans and controls is detectable, given the likely sample sizes and likely variability that we would encounter in this analysis. We looked at various factors to assess this, the sample size that we would expect, the false-positive and false-negative rates that we thought would be allowable, the analytical measurement problems that we know we will encounter with this kind of an analysis, and some other factors.

We then calculated, based on various sample sizes, sample sizes of having Vietnam -- specimens from Vietnam veterans ranging from 30 up to 60, to 120. And we looked at what power we would have to do some statistical tests, given that we had those sample sizes.

We found that for false-positive -- assuming a false-positive rate of about 10 percent, and a false-negative rate of 10 percent, and having an overall variability from sources like measurement error, the analytical measurement, that was in the moderate to

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

1	high range (which is being conservative for what we would
2	expect) with a sample size of about 30, we could detect
3	the difference of about a ratio of 2.4, that is levels in
4	Vietnam veteran specimens that were 2.4 times the control
5	group.
6	That was assuming a one-to-one matching. If we
7	can get up to a two-to-one, or three-to-one matching, we
8	get that down we could detect a doubling of the average
9	level of dioxin in Vietnam veterans.
10	If the sample size increases to 60 Vietnam veteran
11	that specimens that we have, then the ratio/we can detect can
12	go down to about 1.7. And if we can get up to 120, the
13	ratio that we could detect would be about 1.2.
ì4	As I said, we did this analysis with the expecta-
15	tion that we would have moderate to high variability,
16	primarily from measurement error.
17	Let me jump on to where we are right now, as far
18	as the number of specimens that we have identified and the
19	number of Vietnam veterans that we have identified. We
20	had 520 specimens eligible for this study
21	on the basis of age and sex, and the fact that
22	we had the specimens in the archives. So, we have 520
23	specimens in our archives that meet the eligibility
24	requirements. We have 470 of that 520
25	that now have been identified by social security number,

or name. We have thus far identified 80 of these as being veterans, using the Veterans Administration BIRLS file, and I don't really remember what BIRLS stand for.

So, we have identified 80 there, and of that we would expect -- and these records will then be taken by the Veterans Administration and be sent to the GSA, who holds the old Defense Department records, to determine whether these veterans served in Vietnam.

would be Vietnam veterans.

The /80 we look at as being the minimum number of veterans and the corresponding 30 to 50 also being a minimum, and we think that the DOD records may provide that many more veterans than we ascertained through the BIRLS files.

We expect anywhere between 30 and 50 of these 80

So, we are not just taking the 80 veterans and sending them to the DOD files, to see which ones are Vietnam veterans, we are taking all of the 470 that we have names and social security numbers for and taking them and running them all through the DOD files as well, because we suspect that there may have been some that we missed by just looking at the BIRLS files.

So that is why we expect more than 80, as the total number of veterans and more than 30 to 50 of the Vietnam veterans, but that is the status right now of those numbers. So, we have the potential of detecting somewhere

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

1	between a doubling and a tripling. If there is a doubling
2	or a tripling of the average level of dioxin in adipose
3	tissue, we would expect to be able to detect that from the
4	numbers that we have now, we would probably get down to
5	below, between one and a half and two times, being able
6	to detect that kind of ratio, if we get a greater number
7	of Vietnam veterans as we expect to, when we go through
8	the DOD files.
9	DR. SHEPARD: Thank you very much for a complete
10	detailed report.
11	Are there questions?
12	DR. ANDERSON: Will you make an attempt to corre-
3	late these individual Vietnam veterans with the organizations
4	in which they served, as to whether or not they were highly
15	exposed, or essentially dioxin treated area?
16	MR. CARRA: Yes, I think we are going to be giving
17	this information to the Veterans Administration, and they
18	have the military I don't know what the file is called,
19	but there is a file that has down to a squad
20	DR. SHEPARD: Yes, we would use the same method,
21	using the service of Mr. Richard Christian's group, now
22	known as the U.S. Army and Joint Services Environmental Support
23	Group, that is doing the
4	exposure identification for the big CDC study.
25	MR. CARRA: Now, there is going, of course, be a

**NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1330 VERMONT AVENUE, NW WASHINGTON, D.C. 20005

limitation in doing that, a great limitation by the fact that we will be dealing with sample sizes that will allow some crude comparisons. But when you start getting into breaking things down into really fine -- a greater number of cells, we will likely not have more than about 60 to 80 Vietnam veterans to work with.

DR. ANDERSON: How many grams of fat is critical?

MR. CARRA: The specimens in the archives that

we have have at least two grams and most of them have

between five and 10 grams.

DR. ANDERSON: Do you think that is sufficient?

MR. CARRA: Yes, the protocols that were developed by the Midwest Research Institute for us, would give us down to levels of detection in the one to 10 parts per trillion range for specimens that were of the size that we are talking about here, around five grams, and even lower than that. We think we could get down to parts per trillion range.

And the calculations that I gave you before, of the ratios of detecting differences are really what we are after. Those calculations took into account that we would have some limitations with the analytical method.

DR. FITZGERALD: Mr. Carra, I am confused, have you established an average national norm finding in the

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

(202) 234-4433

specimens you have?

MR. CARRA: No, these specimens have been analyzed for a number of pesticides and organic chlorine chemicals in the past, over the last 14 years, DDT, DDE, Beta BHC, aldrin, deldrin, PCBs -- a number of chemicals; dioxin was not one of those chemicals. And so part of this analysis is going to give us a background level.

So, I talked about one particular thing, of comparing the Vietnam veterans to the general population values. If we had problems with the number of Vietnam veterans' specimens that we had and some confounding factors, like the one Dr. Anderson mentioned, where they might vary widely as to the exposure that you might expect, we would still get out of this study an idea of the general population values that we could expect for people in this age group, from the adipose study.

DR. FITZGERALD: And that would be broken down by geographic areas?

MR. CARRA: It could be broken down by geographic areas, especially since we will have a large number of non-Vietnam veterans -- we will probably have about 400 or so, non-Vietnam veterans. So, we will probably be able to get a fairly good geographic stratification with that number.

MR. WALKUP: I would like to follow-up on Dr.

Anderson's question concerning the separating of the people out from the Vietnam veterans group. Do I understand correctly that you are going to include all Vietnam veterans who are identified, who are known for the study you are talking about, and possibly breaking them down into cells by the period of service and the unit they were in, regardless of whether they served in Vietnam during the time when the spraying was going on, or in areas where the spraying might have occurred?

MR. CARRA: I think it would be useful to get an idea of the levels of exposure that -- the different levels of exposure that the people may have had. And to the extent -- the more detailed you can be in doing that, the better. The only major misgiving I have about that is the sample size that we are dealing with, it is probably going to be -- the statistical analysis--my guess is that the statistical analysis would be one of comparing the major with a categorization groups, and possibly coming up/that said this was the high exposure group and this was the low exposure group.

This/ making a crude categorization within the

Vietnam veterans' specimen group, and that's about it.

You start getting any finer, and then what you are doing is looking at things on a case-by-case basis, which would be very useful, but it is not going to yield any statistically defensible results.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

•	
1	
2	probably
3	no possil
4	
5	that is a
6	veterans
7	assumed t
8	But the t
9	pare to -
10	where the
11	want to d
12	to the ge
13	a differe
14	if there
15	these fil
16	make a di
17	
18	exposure,
19	detectabl
<u>,                                    </u>	

MR. WALKUP: But it does sound as if there will probably end up being people included in the group who had no possibility of exposure.

MR. CARRA: That were Vietnam veterans, yes, that is a distinct possibility that we will have Vietnam veterans who, by looking at the files we have, would be assumed to have no exposure to dioxin, or Agent Orange. But the thing we have to look at is how those people compare to -- we will have general population numbers, too, where these people had no service in Vietnam, and we would want to compare these low, or no exposure Vietnam veterans to the general population values, to see whether there is a difference there, because that might indicate that even if there was no exposure that you could identify through these files, that maybe just being there was enough to make a difference.

DR. SHEPARD: If I may just add, or the subsequent exposure, or previous exposure might have resulted in detectable levels.

I would like to just make sure that everybody understands that

for some of the individuals it may not be possible to identify an exposure level, because their records may not be complete, for a variety of reasons; it may not be possible to determine what the likelihood of

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

21

22

23

24

exposure is in every instance. An attempt will be made to do that, but we can't predict at the present time, since we don't know who these individuals are. We haven't searched through the personnel records yet to determine what units they were attached to. So, it is a little early to predict what we will be able to say about it.

I have two questions.

1. In the material you have available which might be designated background material; that is, people who have not been exposed to concentrations of TCDD, such as one might expect to find in a factory, out who may have some TCDD due to normal background levels in the atmosphere? Am I right in assuming that you have not tested such material and therefore, do not have a base line of what might be called a normal TCDD level in a population existing under That is one thing that we are concerned about, and we are going to be analyzing as well. But because we have measured these specimens for other things, we are going to analyze -- when we analyze the specimens for dioxin, we will analyze them for some of the other chemicals again, to see whether we can detect any deterioral tion in the levels and use that to adjust our results.

2. Do you have any information available about material which has been kept for some considerable time and then tested again? In other words, does the TCDD level change? Does degradation take place on storage?

**NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1330 VERMONT AVENUE, NW WASHINGTON, D.C. 20005

24

MR. CARRA: No.

DR. LUMB: That would give a handle --

MR. CARRA: What we are relying on is to be able to look at these other chemicals that we have analyzed previously, and we can get a complete profile on the organo-chlorine pesticides. And we would make the assumption then that these would degrade similarly.

DR. KAHN: I could, perhaps, field that last question a little bit. There is very good evidence that the metabolism of dioxin in the mammalian systems proceeds with great slowness. These things are being stored frozen at -80 degrees, so the likelihood of degradation is very, very small.

MR. CARRA: That's what we expect, but we are concerned about that. We do want to check it because specimens that have been stored for this long, also, could have undergone a lot of episodes that we may not know about, may not have documented. So we are going to have to be very careful.

DR. KAHN: I hope they all are in glass jars.

MR. CARRA: Yes, they are. They are what we would consider to be very carefully preserved; whether in 14 years now they have undergone any thawing and then re-freezing due to power failures, or things like that, that is one of the concerns that we have. We don't think it is going to be a problem, but we have it in the back of our minds that it is something we are going to have to pay attention to, because that is the first question that people are going to have, and reasonably so.

DR. HODDER: Just a quick question. In relation to the fact that you have already studied these people, have you looked at the comparison of the small sub-set with the other people for what you have already looked at? In other words, are they unusual, compared to their exposure to anything else?

MR. CARRA: Most of our effort has been spent in developing the method and in getting the social security numbers and/or names from the institutions. This has not been a trivial exercise. We have had to go back to these institutions and beg them to get us social security numbers, and we have been working with the VA, with their BIRLS files. That is really where we have put most of our effort, we have not, to this point analyzed -- but that is something that is very easily done. Once we have these specimens that we are going to be working with identified, we have

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

a complete data file, automated data file that has all of 1 the information by patient ID number and all of the other 2 chemicals that were found in these specimens. 3 So, we can do that, and we will. DR. SHEPARD: Thank you very much, Mr. Carra. 5 We are running a little behind schedule, so I am going to 6 Dr. Kang to give you a brief description of a 7 ask planned study, using the services of Armed Forces Institute 8 of Pathology. 9 On the agenda we also have Dr. Irey, and I would 10 like to have Dr. Irey give us his report during 11 Subcommittee our scientific/meeting on epidemiology. So, if that 12 is all right with Dr. Irey, Dr. Hodder, I would like to 13 make that minor change in the agenda. 14 VA/AFIP PATHOLOGICAL EVALUATION OF MALIGNAMY NEOPLASMS IN PTF Thank you, Dr. Shepard. DR. KANG: 15 The research plan I am discussing this morning is 16 a joint effort between Veterans Administration and AFIP. 17 We heard this morning that there are massive research 18 efforts ongoing by/state and federal government./CDC is 19 conducting a large-scale epidemiological study consisting 20 of three segments: Vietnam experience, Agent Orange 21 exposure and then selected cancer case control study. 22 Of course, the Veterans Administration is conduct-23 ing a morality study, and case control study for soft 24 (For vu-graphs used by Dr. Kang see pages 148-154). tissue sarcoma. 25

As a parallel effort, we decided to review the

VA in-patient medical records to see whether there is any

difference between Vietnam veterans and non-Vietnam veterans

with respect to their reasons for admission into VA hospitals.

the

There has been some discussion in/scientific literature

that people exposed to phenoxy herbicides may have -- they

may be at higher risk of developing soft tissue sarcoma,

lymphoma, and possibly liver cancer.

As you know, it takes about 20 years to have cancer to develop, if it is caused by environmental chemicals. It has been almost a decade since the last and American troops withdrew from Vietnam, about 20 years since the first massive Agent Orange exposure occurred in Vietnam. So, we are proposing to study the Vietnam Era veterans who have been treated in the VA hospitals with a cancer diagnosis.

We would like to compare Vietnam veterans' cancer patterns with their counterparts in the VA hospital. We recognize that all Vietnam Era veterans with a cancer problem have not come to VA medical facilities for treatment. However, the question has been raised many times, do Vietnam veterans treated by VA hospitals present different or unique health problems, as compared to the non-Vietnam veterans?

After a preliminary VA in-patient medical record

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

review, we have decided to focus on malignant neoplasms.

This is a review of 13,000 medical records among Vietnam

Era veterans. This is a kind of diagnosis, the reason for them

being admitted to the VA hospital.

If you look at the bottom line, out of 13,446

Vietnam Era veterans in VA hospitals, roughly 58 or 60 percent did not serve in Vietnam, and 41 percent served in different categories, vietnam. And if you look at / disease starting seem from infectious and parasitic disease, These proportions/to be true for each disease category.

In other words, the reason for being admitted in the VA hospital is independent of service in Vietnam.

Incidentally, this is the medical record of VA in-patients between 1969 and 1982.

We also sampled recent medical records of Vietnam Era veterans, we sampled about 1,000 and looked at the reasons for being admitted to the VA hospitals. Again, a similar pattern seems to maintain, roughly 60 percent of the in-patients during FY 83 did not serve in Vietnam and about 40 percent served in Vietnam. And then the individual breakdown by/disease category is similar, 60-40, with a few exceptions.

This is the number of the cancers among Vietnam

Era veterans in 1981, broken down by primary sites. This
is the kind of question we would like to address with

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

joint this/effort between VA and AFIP. We would like to know 1 whether Vietnam Era veterans who have been hospitalized 2 in a VA medical facility -- the histopathology and anatomic 3 site of cancer among the Vietnam veteran is significantly different from the non-Vietnam veterans and whether cancer frequency 5 among Vietnam veterans is higher or lower, compared to non-Vietnam 6 veterans. We are going to take advantage of VA patient 7 treatment files and AFIP expertise in pathology. This is 8 the study procedure as we envision it at this point. The VA 9 Agent Orange Project Office will develop a roster of 10 cancer patients among Vietnam Era veterans treated in VA 11 hospitals. And we will send that list to each VA medical 12 facility and ask them to provide us with tissue specimens 13 and pathology reports. So then VA Agent Orange Project 14 Office will serve as the central point, and the VA patholog-15 represent ist service will VA and monitor the compliance. 16 The VA medical centers will select appropriate 17 tissue specimens, the pathology report 18

tissue specimens, the pathology report and forward it to the Agent Orange Project Office. The AFIP pathological will review the tissue specimens for the / diagnosis and the Agent Orange Task Force will determine the Vietnam service status, and also Agent Orange exposure likelihood of these individuals.

pathological
So, AFIP will determine the diagnosis
without knowing the veteran's service status, and the Army

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

19

20

21

22

23

24

25

(202) 234-4433

!	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19.	
20	
21	
22	
23	

Ħ

Agent Orange Task Force will determine the service status without knowing the diagnostic status of that individual. And all of this information will be forwarded to the Agent Orange Project Office, which will do a statistical analysis.

This is the kind of sample size we need to make For some determinations. / example, if you want to determine the 50 percent excess of a specific cancer, and if the cancer proportion is only one percent of overall cancers, we will need over 10,000 cancer cases in each group. And if the proportion of cancer is 5 percent,

you would need about 2,000 cancers from each group; and if it is over 10 percent, of course the sample size goes down to 916.

At this time we are proposing to take a sample of 2,000 in each group; 2,000 Vietnam Era veterans and 2,000 non-Vietnam veterans.

The kind of analysis we would like to do, is a simple analysis: looking at differences in histopathology and anatomic sites between

Vietnam and non-Vietnam veterans; and anatomic site looking at the pathology/by Agent Orange exposure likelihood. And finally, as a by-product of this effort, we can compare the VA diagnosis to AFIP diagnosis.

DR. SHEPARD: Any questions?

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

24

DR. SHEPARD: Dr. Conway will be attending with Dr. Irey the meeting of the subcommittee on biostatistics and epidemiology, so if there are further questions, I am sure they will be happy to answer them at that point.

We said that Mr. Fred Conway, of our General Counsel Office might be available for questions relating to the litigation and the recent legislation.

not be available for the entire time -- he has an important meeting he has to attend, and will have to be leaving for it fairly soon -- would it be all right with you, Fred (Mullen) to have Mr. Conway available to the opening portion of your subcommittee meeting, to answer any questions that people may have in that regard?

MR. MULLEN: I see no problem with that.

DR. SHEPARD: That being the case then, let's adjourn to our separate subcommittee meetings. The Committee on Education and Information will adjourn to Room 139, down the hall.

(Whereupon, the meeting was recessed for members to attend the subcommittee meetings, and will reconvene at 1:00 p.m.)

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

(12:55 p.m.)

DR. SHEPARD: We will return to our agenda. And the first item on the agenda is to hear reports from the activities of our two subcommittees. And I would like first to call on Mr. Fred Mullen to give us an update on what occurred in the process of his subcommittee. Fred.

## REPORTS OF SUBCOMMITTEES

MR. MULLEN: We need time -- it seems that the last three subcommittee meetings that I chaired have started between 20 minutes to 35 minutes late. And I think one of the reasons for this -- and I think I have somewhat of a consensus on it -- is that in the full plenary session in the morning we are hearing primarily a scientific reporting which I think should be done during the scientific subcommittee panel. Likewise, we have guest speakers in our subcommittee who do not get a chance to present because the issues they are dealing with do not directly deal with scientific issues.

During the meeting it was brought out that these people come from a long way away, to come down here, and given the time schedule that is pre-planned in the agenda, they don't have enough time to get their questions answered, which we believe should be done. If there are quest speakers dealing with scientific issues, and they

have a prepared text, I think what they should do is make the text a handout, if they are going to give a presentation, and then briefly summarize.

If it is considered of importance to the veterans here in the audience, they could pick up the handout and ask questions at the appropriate time, after the presenter is finished.

What it boils down to is we just don't have enough time to get our meeting in, because the majority of the morning is taken up with scientific issues and then you have a scientific subcommittee afterwards. And we don't have the benefit of that time.

There are numerous issues that have to be addressed, not only dealing with the litigation, the outreach centers, the claims process, et cetera, et cetera.

Another thing that we wanted to bring to your attention is,I think Don has satisfactorily answered this, because there are some minutes being taken at our subcommittee meetings, and what is planned for the future is that the minutes from our subcommittee meeting, as opposed to the full committee transcript, will be attached to the full committee transcript to send out as an appendix, so everyone will get it.

DR. SHEPARD: From both subcommittees?

MR. MULLEN: From both subcommittees.

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

One of the issues that was brought up is the more or less subpoending of the medical records and names from the Agent Orange Registry. There is some confusion there Conway about the Privacy Act, and I think Fred/covered it pretty well. The Privacy Act does quarantee privacy and confidentiality of all of your public records, however, a court of competent jurisdiction has the right to subpoena those records, and so can your congressman,

if it is for a good cause.

Fred Conway is going to get that straightened out for us, go down to the Justice Department and get us some answers before our next meeting.

I touched on the issue of conference calls. believe that we have a pretty extensive Agent Orange outreach program, with well over 100 centers, and you have 172 VA medical facilities. You have a lot of veterans going into these centers seeking counseling, not only on post-traumatic stress, but on Agent Orange issues as well. And the reason they are turning to the Vet centers on Agent Orange issues is because of the reluctance of a great number of those people to submit themselves to examination at a VA medical facility.

However, it came out during our meeting that the directors of the outreach centers are not privy to these They may have questions out there in conference calls.

individual centers that need to be answered as well, in order to make the overall Agent Orange screening and testing program that much more effective.

We would suggest that someone from the Office of the Director of the Outreach Program be included in those conference calls, at least a subordinate, in order that he can get some information out to the field, and help these people in these outreach centers.

I think that is about all we touched on, but the main issue was time. And we don't think that scientific methodology makes -- to explain scientific methodology to the lay veteran is going very far, it is just eating up time. And I think we are more interested in grass roots issues.

If they want to be in on the scientific, analytical issues, they have that option.

One other thing, I suggested to Don that we have more or less an open-ended agenda, because we don't know what issues these veterans are going to bring in from the field, whereas the scientific panel knows what studies are going on, and knows what issues are going to be presented and spoken on. If there was just a summary of the latest data, or statistics arising out of these studies, I think that would suffice to satisfy the veterans' curiosity, without knowing how they arrived at it through an

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1330 VERMONT AVENUE, NW
WASHINGTON, D.C. 20005

epidemiological approach.

I think that's about it, unless you have something DR. SHEPARD: Any comments, or responses from any of the members of that committee?

Do any of the members of the committee want to ask questions of any members of the subcommittee?

(No response.)

DR. SHEPARD: I would like to respond in a couple of areas, if I may. I certainly agree, Fred, as time has gone on, I think that your committee does need more time, open-ended time, unstructured time, if you will, so that questions can be raised and answers can be obtained, to the extent that answers are available.

I take the responsibility for not counseling the scientific presenters in the open plenary session, if you will, to confine their comments to basically summary comments, and then address particular, more detailed scientific questions -- reserve that for

the scientific subcommittee.

In some instances we have done that, and I think it has worked very well. I think we, perhaps, in today's agenda perhaps we are not as cautious in doing that as we might have been. So, I apologize for that, and I apologize for running over a little more. We had a few more items to deal with of a general nature, than we often do.