

Monsanto

NOV 2 1982

FROM
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DATE : November 2, 1982

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Attached is a draft news release and preparedness Q/A on Suskind's health effects study. Please review and let me have your comments by Wednesday afternoon, 11/3/82. Thanks.

Sarah

Sarah G. Collins

SGC:ue
Attachments

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C14144

NEWS

Monsanto

FOR RELEASE

IMMEDIATELY

DRAFT/Suskind Study

Sarah G. Collins

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PUBLIC RELATIONS DEPARTMENT

Monsanto Company

800 N. Lindbergh Boulevard

St. Louis, Missouri 63167

REPORT FAILS TO FIND
LINK BETWEEN TCDD AND
REPORTED HEALTH
PROBLEMS

ST. LOUIS, NOV. 00 -- A study on the long term health effects of worker exposure found no link between exposure to the dioxin TCDD and several physical diseases and disorders including cancer, cardiovascular and reproductive abnormalities.

The health effect study, which required three years of analysis, was conducted by Raymond A. Suskind, M.D., one of the world's leading experts on ^{the human effects of} dioxin exposure, at the University of Cincinnati's Department of Environmental Health. TCDD, a contaminant found in a herbicide component of Agent Orange, is at the center of a controversy over the health effects of Agent Orange exposure on Vietnam veterans.

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According to Dr. Suskind, there is no evidence of (identifiable) long term effects on the cardiovascular system, including hypertension or coronary artery disease, liver, gastro intestinal tract or peripheral nerve function attributable to exposure to the chemical. There is also no indication, ~~based on~~ ~~personal historical information~~, of greater risks for miscarriages, stillbirths or birth defects among the families in which the male parent was exposed to TCDD. Additionally, Dr. Suskind did not find ~~an abnormally high cancer rate~~ among the study participants. *a cancer rate ~~to~~ any higher than would be expected for normally exposed*

- more -

C14145

clerk
However, Dr. Suskind did conclude that for employees exposed to TCDD, there were long term skin effects including chloracne, the hallmark of TCDD exposure, and the loss of skin elasticity around the areas affected by chloracne.

Dr. Suskind examined 418 current and former male employees of Monsanto Company that produced the herbicide 2,4,5-T at its West Virginia plant between 1948 and 1969. ~~TCDD has been identified as a contaminant in the production of~~ 2,4,5-T. The employees involved in Dr. Suskind's study included workers who had been exposed to ^{2,4,5-T} ~~TCDD~~ during a 1949 manufacturing accident in the 2,4,5-T unit as well as those who worked with the herbicide over the years.

This health effects study is the second major study conducted by Dr. Suskind on Monsanto's West Virginia employees. In 1980, he co-authored a report on the mortality (cause of death) of employees who had been exposed to TCDD during the 2,4,5-T accident in 1949. The results of that investigation indicated no excess in total deaths or in deaths from cancer or cardiovascular disease.

Dr. Suskind recently presented a review of his health effects study at the Third International Symposium on Chlorinated Dioxins and Related Compounds in Salzburg, Austria.

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2,4,5-T was a component of Agent Orange, a defoliant
However, Dr. Suskind did conclude that for employees
used by U.S. military forces during the Vietnam War. Dr.
Suskind's latest study on the long term effects of TCDD
exposure supports the majority of medical and scientific data
which has failed to show a cause/effect relationship between
Agent Orange exposure and health problems reported by Vietnam
veterans.

conducted by Dr. Suskind on Monsanto's West Virginia
employees. In 1969, he corroborated a report on the mortality
investigation indicated no excess in total deaths or in deaths
from cancer or cardiovascular disease.

effects study at the 1970 International Symposium on
Cancer and the Environment, which was held in Washington, D.C.

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NEWS

*Effect on
publication
Approval by
See hold*

Monsanto

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DRAFT/Suskind Study

REPORT FAILS TO FIND
LINK BETWEEN TCDD AND
REPORTED HEALTH
PROBLEMS

*As this consistent
with our references
to TCDD in the
past?*

ST. LOUIS, NOV. 00 -- A study on the long term health effects of worker exposure found no link between exposure to the dioxin TCDD and several physical diseases and disorders including cancer, cardiovascular ^{disease} and reproductive abnormalities.

The health effect^s study, ~~(which required three years of analysis)~~ was conducted by Raymond A. Suskind, M.D., one of the world's leading experts ^{on the human effects of} on dioxin exposure, at the University of Cincinnati's Department of Environmental Health. ~~TCDD, a contaminant found in a herbicide component of Agent Orange, is at the center of a controversy over the health effects of Agent Orange exposure on Vietnam veterans.~~

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According to Dr. Suskind, ^{found} ~~there is no evidence~~ of ^{adverse} ~~identifiable~~ long-term effects on the cardiovascular system, including hypertension or coronary artery disease, ^{on the} liver ^{and} gastro intestinal tract ^{on} or peripheral nerve function attributable to exposure to the chemical. There is also no indication, based on ~~individual medical histories obtained from those participating in the study~~ ^{personal historical information}, of greater risks for miscarriages, stillbirths or birth defects among the families in which the male parent was exposed to TCDD. Additionally, Dr. Suskind did not find ~~an abnormally high cancer rate~~ ^{abnormal} among the study participants.

*Normally
found in
Agent Orange
or other
pesticides*

*in the
persons he
studied.*

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the by-products of a runaway reaction, presumably including

However, Dr. Suskind did conclude that for employees exposed to TCDD, there were long term skin effects including chloracne, the hallmark of TCDD exposure, and the loss of skin elasticity around the areas affected by chloracne.

Dr. Suskind examined 418 current and former male employees of Monsanto Company ^{who worked in the production of} ~~that produced the herbicide~~ 2,4,5-T at its West Virginia plant between 1948 and 1969. ~~TCDD~~ ^{including} ~~has been identified as a contaminant in the production of~~

~~2,4,5-T~~ The employees involved in Dr. Suskind's study ~~unknown products of decomposition, present~~ included workers who had been exposed to TCDD during a 1949 manufacturing accident in the 2,4,5-T unit, as well as those who worked ^{in (production of)} ~~with~~ the herbicide over the years.

This health effects study is the second major study conducted by Dr. Suskind ^{in recent years} on Monsanto's West Virginia employees. In 1980, he co-authored a report on the mortality (cause of death) of employees who had been exposed ~~to TCDD~~ during the 2,4,5-T accident in 1949. The results of that investigation indicated no excess in total deaths or in deaths from cancer or cardiovascular disease.

Dr. Suskind recently presented a review of his health effects study at the Third International Symposium on Chlorinated Dioxins and Related Compounds in Salzburg, Austria.

^{During 1949-1953} Dr. Suskind examined some of the workers involved in the 1949 ~~accident~~ incident. Thus, his ^{- more -} study is an especially important contributor to the body of scientific knowledge dealing with the long-term effects of exposure

C14149

2,4,5-T was a component of Agent Orange, a defoliant used by U.S. military forces during the Vietnam War. Dr.

Suskind's latest study, ~~on the long term effects of TCDD~~ ^{Exposure to 2,4,5-T and}

~~exposure supports the majority of medical and scientific data~~ ^{Consistent finding of all credible studies}

~~which has failed to show a cause/effect relationship between~~

~~Agent Orange exposure and health problems reported by Vietnam~~

~~veterans.~~

Compliment Suskind following up on Nitro workers since 1949

is a ^{significant} ~~valuable~~ contribution to the growing body of systematic scientific and medical inquiry into the ~~consequences~~ long-term consequences of exposure to TCDD. The growing consensus of ~~such~~ those studies is that there is no cause/effect relationship between exposure to substances such as Agent Orange and ^{the} health problems ~~of the~~ reported by Vietnam veterans.

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Q/A

Suskind Health Effects Study

1. Q. Did Dr. Suskind receive any money from Monsanto for his study?

A. Yes, he did. The study was also supported by the National Institute of Environmental Health Sciences of the U.S. Public Health Service as well as the University of Cincinnati's Institute of Environmental Health.

2. Q. How can the study be viewed as impartial if Monsanto helped pay for it?

A. Dr. Suskind is one of the world's leading experts on dioxin exposure. To doubt the validity of the study's results because of Monsanto's funding is to impugn the reputation of a respected medical and scientific expert.

3. Q. How many employees were involved in the study?

A. There were 418 white male employees in three groups relating to 2,4,5-T exposure; 204 in exposed population; 163 not exposed and 51 of questionable exposure.

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4. Q. How come there are no minorities or women?
- A. There were minority and female employees involved in both the 2,4,5-T production history and the 1949 accident. However, the number was not large enough to allow a valid study and therefore, they were not included.
5. Q. Would their inclusion make any difference in the results?
- A. No.
6. Q. What effect does the health study have on pending litigation against Monsanto?
- A. The study results support Monsanto's position that its employees involved in 2,4,5-T production or in the 1949 accident have not experienced long-term health effects other than chloracne. As Monsanto stated when the lawsuit was filed (March '81), it does not believe the plaintiffs' charges have any merit and that the company will be vindicated.
7. Q. Wasn't 2,4,5-T used in Vietnam?
- A. 2,4,5-T was a component of Agent Orange, a defoliant used by U.S. military forces between 1962 and 1971 in Vietnam. 2,4,5-T and its contaminant 2,3,7,8-TCDD veteran's alleged health effects of exposure to Agent Orange.- The Suskind health effects study is yet another medical report which supports the majority of health and scientific data that has failed to find a cause/effect relationship between Agent Orange exposure and the health problems reported by Vietnam veterans.

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4. Q. Now, could there have been any other causes of the accident?
8. Q. What happened at your plant in 1949?

A. In March of 1949, an accident occurred in the 2,4,5-T unit exposing those present and those later involved in the clean-up to potentially hazardous amounts of the chemical and its dioxin contaminant, 2,3,7-8 TCDD. Approximately 121 employees developed chloroacne, eye and respiratory tract irritation, headache, dizziness, nausea and liver disorder. These employees all received medical treatment after the accident for their exposure-related conditions. All symptoms, except some cases of chloroacne, disappeared within several months.

9. Q. How long was Monsanto in the 2,4,5-T business?

A. Monsanto manufactured 2,4,5-T between 1948 and 1969 when it discontinued production for economic reasons.

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