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CHEMICAL MANUFACTURERS ASSOCIATION

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Dear Vinyl Chloride Panel Member:

Enclosed is the draft report "Epidemiologic Study of Vinyl Chloride Workers." At this time I am trying to schedule a meeting with EHA for the first part of September to discuss the results and the report. I will let you know the date and time, and where the meeting will be held, as soon as I have the information.

Please review the draft report. I would appreciate receiving your comments on this by the end of August so that we are prepared to discuss it at the September meeting.

Sincerely,

Has Shah

Has Shah, Ph.D.

Manager

Vinyl Chloride Program

Enclosure

VVV 000002429

Environmental Health Associates, Inc.

August 7, 1986

Hasmukh C. Shah, Ph.D.
Program Manager
Biomedical and Environmental
Special Programs
Chemical Manufacturers Association
2501 M Street, NW
Washington, D.C. 20037

Dear Has:

Enclosed please find the draft report "Epidemiologic study of Vinyl Chloride Workers". After the Task Force has a chance to review the report, we can schedule a meeting in our office in Oakland to discuss the results and the report.

I am also sending you the last invoice of the project. It has been a pleasure working with you and the Task Force on this project.

Sincerely yours,



Otto Wong, Sc.D.
Senior Epidemiologist

Enclosure

OW/kmc

VVV 000002430

Draft

Epidemiologic Study of
Vinyl Chloride Workers

Prepared for
Chemical Manufacturers Association

Environmental Health Associates, Inc.
520 Third Street, Suite 208
Oakland, CA 94607

August 5, 1986

VVV 000002431

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Table of Contents

	Page
Summary	i
Introduction	1
Materials and Methods	4
Original Study	4
Study Update	7
Results	13
Descriptive Statistics	13
Cause-specific Mortality Analysis	15
Entire Cohort	15
Analysis by Length of Exposure	17
Analysis by Latency	19
Analysis by Age at First Exposure	20
Analysis by Calendar Year of First Exposure	22
Analysis by Type of Plant	23
DISCUSSION	25
CONCLUSION	35
References	36
Tables	37-55

List of Tables

Table

1. Distribution of Vinyl Chloride Plants Studied by Product and Number of Workers
2. Distribution of Vinyl Chloride Plants and Vinyl Chloride Workers by Geographic Regions
3. Distribution by Vital Status as of 12/31/72 in Original Study
4. Distribution by Year of Birth of Cohort Members
5. Distribution of Year of Hire of Cohort Members
6. Distribution of Age at Hire of Cohort Members
7. Length of Employment as of 12/31/1982 of Cohort Members
8. Distribution of Vital Status of Cohort Members
9. Distribution of Year of Death of Cohort Members
10. Distribution of Age at Death of Cohort Members
11. Observed and Expected Deaths by Cause SMRs and Their 95% Confidence Limits for all Cohort Members
12. Observed Deaths by Cause and SMRs for all Cohort Members by Length of Vinyl Chloride Exposure
13. Observed Deaths by Cause and SMRs for all Cohort Members by Latency Since First Exposure to Vinyl Chloride
14. Observed Deaths by Cause and SMRs for all Cohort Members by Age at First Exposure to Vinyl Chloride
15. Observed Deaths by Cause and SMRs for all Cohort Members by Year of First Exposure to Vinyl Chloride
16. Observed Deaths by Cause and SMRs for all Cohort Members by Type of Plant
17. Characteristics of 37 Deaths From Cancer of the Liver
18. Characteristics of 23 Deaths From Cancer of the Brain and Other Central Nervous System
19. Characteristics of 41 Deaths From Emphysema

Summary

The cohort consisted of 10,173 men who had worked for at least one year in jobs involving exposure to vinyl chloride prior to January 1, 1973. These men were employed at 37 plants in the U.S., belonging to 17 companies. Observation of the mortality experience of the cohort was extended to December 31, 1982. A total of 1536 cohort members were identified to have died. The observed mortality, by cause, was compared with the expected based on U.S. mortality rates, standardized for age, race and calendar time. Analyses by length of exposure, latency, age at first exposure, calendar year of first exposure and type of products were performed. The study confirmed that the vinyl chloride workers experienced significant mortality excesses in angiosarcoma (15 deaths), cancer of the liver and biliary tract (SMR = 641), and cancer of the brain and other central nervous system (SMR = 180). In addition, the study also found a significant mortality excess in emphysema (SMR = 179). On the other hand, the study did not find any excess in either respiratory cancer or lymphatic and hematopoietic cancer.

VVV 000002435

TABLE 19
CHARACTERISTICS OF 41 DEATHS FROM EMPHYSEMA, INCLUDING C.O.P.D.

CASE No.	PLANT No.	CAUSE OF DEATH *	YEAR OF BIRTH	YEAR OF HIRE	YEAR OF FIRST EXP.	YEAR OF TERMINATION	YEAR OF DEATH	AGE AT DEATH	DURATION OF EXPOSURE	LATENCY
1	15	527.X	1915	1938	1963	1972	1982	66	9.7	19
2	36	527.X	1903	1946	1946	1968	1974	71	22.2	28
3	36	527.X	1915	1953	1953	1970	1978	62	17.3	25
4	14	527.X	1909	1953	1953	1954	1977	68	1.0	24
5	27	527.X	1913	1962	1965	1972	1976	62	7.2	10
6	27	527.X	1913	1948	1958	1972	1978	65	13.6	20
7	27	527.X	1930	1955	1955	1956	1965	35	1.3	10
8	19	527.X	1922	1961	1961	1969	1981	59	7.8	20
9	12	527.X	1914	1951	1951	1972	1976	62	21.9	25
10	12	527.X	1895	1936	1952	1960	1969	73	7.7	16
11	12	527.X	1908	1951	1951	1962	1966	57	10.8	15
12	12	527.X	1912	1942	1945	1947	1980	67	1.8	34
13	12	527.X	1896	1943	1943	1948	1961	64	5.1	17
14	39	527.X	1900	1946	1948	1960	1980	80	12.3	32
15	39	527.X	1913	1940	1968	1970	1972	58	3.0	4
16	25	527.X	1903	1932	1936	1960	1970	67	23.4	33
17	33	527.X	1908	1947	1947	1952	1978	70	4.7	30
18	33	527.X	1900	1944	1944	1948	1980	80	3.5	36
19	33	527.X	1919	1947	1947	1954	1980	60	6.7	32
20	33	527.X	1910	1953	1953	1958	1980	70	5.0	27
21	33	527.X	1907	1942	1942	1943	1975	67	1.2	33
22	33	527.X	1921	1947	1947	1949	1977	56	1.9	30
23	33	527.X	1890	1943	1943	1955	1966	75	12.1	22
24	33	527.X	1888	1945	1945	1953	1962	74	7.9	16
25	33	527.X	1904	1947	1947	1967	1971	66	20.2	23
26	33	527.X	1917	1943	1943	1967	1971	54	23.6	28
27	33	527.X	1890	1947	1947	1955	1966	76	8.2	19
28	33	527.X	1914	1945	1952	1971	1977	63	18.7	24
29	33	527.X	1902	1953	1953	1966	1978	76	13.6	25
30	33	527.X	1924	1953	1953	1972	1978	53	19.9	25
31	18	527.X	1918	1964	1964	1967	1980	61	2.6	15
32	18	527.X	1898	1946	1947	1959	1965	67	11.8	17
33	25	527.X	1903	1931	1936	1947	1978	74	11.0	42
34	25	527.X	1925	1948	1948	1950	1981	55	2.7	33
35	25	527.X	1920	1946	1953	1962	1982	61	9.1	28
36	25	527.X	1891	1944	1945	1954	1973	82	8.7	27
37	25	527.X	1915	1936	1944	1949	1974	59	4.8	29
38	25	527.X	1892	1943	1943	1957	1970	78	14.1	27
39	25	527.X	1907	1942	1942	1945	1979	72	2.6	37
40	25	527.X	1911	1937	1937	1939	1976	64	2.8	39
41	25	527.X	1914	1936	1941	1942	1976	61	1.7	35

* = 7th ICD CODES