

CHEMICALS



INTEROFFICE / LAKE CHARLES

TO G. C. Strickler

DATE June 7, 1983

FROM H. B. Lovejoy, M. D.

SUBJECT Angiosarcomas of the Liver Summary

This is an abstract of information that has been accumulated by Dr. John Stafford of ICI, United Kingdom, concerning the total known number of cases of angiosarcoma of the liver (ASL). To date there have been 102 cases of angiosarcoma due to vinyl chloride. There have been a total of 31 in the USA, 21 in West Germany, 14 in France, 10 in Canada and 8 in the United Kingdom. There has been a total of some 53 in Western Europe; 41 in North America; and 8 in the rest of the world. ASL deaths due to VC were first noted in 1955. They reached a peak in the years of 1974 to 1980 and since have decreased so that only one (1) each occurred in 1982 and 1983.

ASL cases tend to cluster in certain plants. Of the total in North America (41), B. F. Goodrich in Louisville had 13; B. F. Goodrich in Shawinigan, Quebec, Canada had 10; Union Carbide in South Charleston, West Virginia had 9; and Goodyear in Niagara had 4. There are 29 pre-1962 PVC plants in North America. Nine of these have had cases of angiosarcoma of the liver. In Western Europe, Dynamit in Troisdorf, West Germany had 10 and 5 each occurred at Kemanord, Sweden; PCUK in Brignaud, France; and Chloe Chimie, France.

In regard to latency in the USA, 31 cases averaged latency of 24.8 years. The 10 Canada cases averaged latency of 20.4 years. In Germany there were 21 cases which averaged 18.3 years, and in France, 14 cases averaging 24 years. The United Kingdom had 8 cases averaging 23.6 years. The shortest latency was 3.5 years in a 37 year old United Kingdom autoclave cleaner with very high PVC exposure.

It is interesting that all of the 9 South Charleston cases had their first year of exposure prior to 1946, and 8 of the 10 Shawinigan cases had their first year of exposure prior to 1947. It is also of interest that of the 102 angiosarcoma liver total cases, only 3 occurred in monomer workers. One was in Sweden, a very heavily exposed employee with a diagnosis in 1972 after 27 years exposure. The other 2 cases were from Yugoslavia, diagnosed in 1973 and 1976 after 22 years exposure each.

The summary prepared by Dr. Stafford is extremely detailed in that each case has been evaluated and reported on by the name, the date of birth, the company, the first date of exposure to vinyl, the date of diagnosis, the age at diagnosis, the years of exposure to the diagnosis, the total years of exposure, the date of death, if histologically confirmed, the particular occupation, estimation of the exposure level, other career highlights, and any other comments that might have occurred, the preparer thought, of interest.

HBL:lr

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