



CHEMICAL MANUFACTURERS ASSOCIATION

August 1, 1994

Clark Heath Jr., M.D.
Vice-President for Epidemiology
and Surveillance
American Cancer Society
1599 Clifton Rd. NE
Atlanta, GA 30329-4251

Dear Dr. Heath:

I am writing this letter on behalf of the Chemical Manufacturers Association Vinyl Chloride Panel to express our concerns regarding a statement in the first full sentence of page fifteen of the ACS publication *Cancer Facts and Figures 1994* (as well as in earlier issues). Referring to the risk factors associated with malignant lymphoma, this statement reads as follows:

"Other possible risk factors include exposures to herbicides, industrial solvents, and vinyl chloride."

We believe that a misunderstanding of this statement may have lead to the association of vinyl chloride exposure with risk of lymphoma in an article by J. Madeleine Nash in the April 25, 1994 issue of *TIME* magazine (page 60). A copy of this page is enclosed. The description in the table entitled "The Big Killers" implies, we believe, that vinyl chloride is a "proven" rather than a "possible" risk factor for malignant lymphoma. We are concerned that others may similarly misinterpret the statement appearing in *Cancer Facts and Figures 1994*.

A large number of epidemiologic studies have been conducted on well-defined occupational cohorts with potential exposure to vinyl chloride. In some of these studies an elevation in lymphoma mortality was observed, but not in others. The largest and most recent such study, published by Wong et al. in 1991, did not observe any excess of lymphatic or hematopoietic cancer deaths, even among workers who were first exposed prior to 1950. In contrast, mortality due to cancer of the liver, with which vinyl chloride exposure is certainly causally associated, was most elevated in the subcohort of workers exposed prior to 1950. We believe that the epidemiologic evidence does not lead to an inference of a causal association between vinyl chloride exposure and malignant lymphoma.

Our view is consistent with that of Sir Richard Doll, who reviewed the evidence in 1988. We note that Doll refers to the studies by Tabershaw and Gaffey (1974) and Waxweiler et al. (1976) as having raised the possibility of an association between vinyl chloride and lymphoma. We hasten to point out that these were early studies conducted on workers who were eventually included in the much larger cohort studies by Wong et al. and referred to in this letter.

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We respectfully request that the statement in *Cancer Facts and Figures 1994* be amended to better reflect the current state of knowledge about the suspected association of vinyl chloride exposure with lymphoma. The suggested wording to be added is (underlined and in italics):

"Other possible risk factors include exposures to herbicides, industrial solvents, and vinyl chloride, although the evidence supporting an association with vinyl chloride exposure is limited."

An alternative to this change of wording would be to remove the specific reference to vinyl chloride from the statement. We note that vinyl chloride is not mentioned specifically as a possible risk factor for cancer of the lung, although there is also equivocal epidemiologic evidence for an association between vinyl chloride exposure and this type of malignancy.

We feel that our suggestion encompasses the current state of the evidence concerning vinyl chloride and lymphoma and would minimize the possibility for the kind of misinterpretation we observed in the *TIME* magazine article. At the same time, we wish to point out that this letter was intended solely to address possible misinterpretations with respect to lymphoma and vinyl chloride. In no way do we acknowledge the existence of any association between exposure to herbicides or industrial solvents and the occurrence of malignant lymphoma.

We trust that this letter and the attachments will serve to provide you with a comprehensive view of the evidence concerning the health effects of vinyl chloride exposure in humans. If you have any questions or would like more information, please contact me at (202) 887-1192.

Sincerely,



Hasmukh C. Shah, Ph.D.
Manager, Vinyl Chloride Panel

Enclosures

References Cited and Enclosed:

American Cancer Society. Cancer Facts and Figures, 1994; 1-28.

Doll R. Effects of exposure to vinyl chloride. An assessment of the evidence. Scand J Work Environ Health 1988;14:61-78.

Nash JM. Stopping Cancer in its Tracks. TIME Magazine 1994; April 25: 54-61.

Tabershaw IR and Gaffey WR. Mortality study of workers in the manufacture of vinyl chloride and its polymers. J Occup Med 1974;16:509-18.

Waxweiler RJ et al. Neoplastic risk among workers exposed to vinyl chloride. Ann NY Acad Sci 1976;271:40-48.

Wong O et al. An industry-wide epidemiologic study of vinyl chloride workers, 1942-1982. Am J Ind Med 1991;20:317-34.