

April 22, 1939

Dr. G. H. Gehrmann
E. I. duPont de Nemours and Company
DuPont Building
Wilmington, Delaware

Dear Doctor Gehrmann:

A few days ago I saw a somewhat unusual type of illness, at least in my experience, in a man who has been engaged for a period of years in spraying lacquers in the manufacture of x-ray equipment. I am disposed to feel that his illness is the result of his occupation. Briefly his symptoms consist of attacks of dizziness with vascular disturbance at times, weakness and tremor which come on from time to time, often without any stimulus and again as the result either of effort or some degree of anxiety. As an example of the latter, when he visited me at the laboratory, he was very much upset by the experience and to a very unusual degree. This I attributed in some measure to anxiety over his condition and to unfamiliarity with doctors. He became dizzy, for a time thought he would faint, but did not, and this was associated with rather unusual variation in the blood pressure and in other vasomotor response.

I could find no organic disease as responsible for this condition, and in as much as the history went back over a period of years while engaged in work with lacquers, it seems probable that he is one of those persons somewhat more susceptible than usual to the effects of lacquer solvents. The condition recently became much more severe and he found it necessary, temporarily at least, to discontinue his work. At the time I saw him, it had been more than a week since he had any exposure of any kind, but the "spells" of weakness and dizziness continued from time to time.

I write you about this because I think you have had much more experience with lacquers than I have had, and it may be that you have seen other cases of this type, and especially in association with other types of solvents. I would appreciate it very much indeed if you would give me the benefit of your opinion and experience as to which of several materials used as solvents might most likely be responsible for this clinical

N 24640

picture.

For your further information, I would like to tell you the materials that are in use in this plant. The lacquers most commonly used are a glossy black enamel - #32 of the Egyptian Lacquer Company of New York City, a black lacquer which gives a leather-like crackle surface - the product of the Zapon Brevolite Division of the Atlas Powder Company with the trade name of Black Brevoxrak. (I believe this product is made by one of your subsidiaries and you may be entirely familiar with it.) In addition a white lead-containing lacquer together with an ivory one is used rarely. Undoubtedly the greatest exposure was to the two black lacquers. Solvents were used as thinners. These were obtained from the Lowe Brothers in Dayton and from Pierce and Stevens in Buffalo. These solvents or thinners were used interchangeably.

If you can give me any light on this problem, I should appreciate it very much indeed.

Perhaps I should say further that the ventilating facilities in this establishment are rather primitive, and that exposure to vapors occurs in fairly high concentration.

With kindest personal regards and the hope that this is not too much of a nuisance to you, I am

Cordially yours,

PAK:is

Robert A. Kehoe, M.D.