

March 17, 1943

Mr. Chester Allen,
The Hilton-Davis Chemical Company,
Langdon Farm Road,
Cincinnati, Ohio.

Dear Mr. Allen:

I am enclosing herewith a summary of the analytical results obtained on a group of your men on whom lead analyses were made at the time of the last series of physical examinations. Comparison of these results with those obtained previously reveal the following facts.

In November of 1939, 8 men working with some exposure to lead compounds showed mean results in the urine of 0.129 ± 0.019 . In May of 1942, 6 men similarly employed gave results of 0.110 ± 0.009 . The last series of results yielded a mean value for 9 of these men of $0.052 \pm .002$

The corresponding mean values obtained on the blood of these groups of men were 0.094 ± 0.013 , 0.050 ± 0.003 and 0.052 ± 0.002 .

These results as a whole can be compared satisfactorily with the results obtained on a group of your workmen employed in the basic dye operations, where they were not exposed to lead compounds. The results on the urine of these men were 0.042 ± 0.005 , and on the blood they were 0.036 ± 0.002 . From all of these comparisons, one is justified in concluding that there is some evidence of lead absorption among your lead workers at the present time. However, the absorption is slight and it is quite clear that the measures taken against hazardous lead exposure are quite satisfactory. In fact, there is less evidence of lead absorption at present than there was in May of 1942, as judged chiefly by the difference in the lead concentration of the urine of the present group. For your information in this connection, we regard the urinary results as the more significant criteria, since greater changes occur in the urinary concentration of lead in response to changes in lead exposure, than are found in the case of the blood.

Cordially yours,

Robert A. Kehoe, M. D.