

January 19, 1937

Dr. Paul T. Holmes
Bunting Brass and Bronze Company
Toledo, Ohio

Dear Doctor Holmes:

I am sending you herewith the analytical results on the group of twenty men which were brought to completion on Saturday.

There are a number of interesting things in the report to which I want to call your attention. First, you will note that there is no correlation between the amount of stippling and the level of lead in the urine and faeces. Second, there is no precise correlation between the quantities of lead found in the urine and those found in the faeces. Third, twelve out of the twenty men show results in the urine of 0.20 mgs. lead per liter or better, while all but five are up to 0.15 or better.

It has been our previous experience that cases of lead poisoning are found almost uniformly to occur within the group whose urinary findings are in the neighborhood of 0.20 mgs. per liter, or better. Those results which are appreciably higher than this are to my mind rather dangerous exposures, and I would be surprised if we did not find some symptomatology in the group of men whose urinary excretion runs above .30 mgs. per liter.

The lead exposure among this group of men is greater than I would have anticipated. It is, I believe, quite a significant exposure and I should confidently expect the occurrence of cases of poisoning among these men. For this reason, and also for the purpose of giving a more precise interpretation of the analytical results, I should like very much to have clinical reports on these men. It is, of course, too early in the game to attempt very precise interpretation, but I think we should have clinical information on these men at the earliest possible time in order to give you the most benefit from our work.

KE 0003508

Dr. Paul T. Holmes

Just a word as to the significance of high results in the urine as contrasted with high results in the faeces. A high urinary lead excretion means undoubtedly a considerable degree of lead absorption. Therefore I should expect to find the highest urinary values among those men who have been employed in the most hazardous occupations for the longest periods of time. The faecal lead, on the other hand, under the conditions with which we are dealing here, would indicate only the general magnitude of the lead exposure on the day prior to the collection of the samples. This will explain why it can be that one of the men in the lower brackets of urinary excretion may show a high lead content in the faecal sample. For example, you will note that Gilmore who shows the lowest lead concentration in the urine, shows 1.70 mgs. in the sample of faeces supplied to us.

I repeat it is too early to draw too definite conclusions from our observations, but I should be very glad indeed to have you supply me with the history of employment of the men in this list. You know where the hazardous jobs are, and you know also the length of service of these men in the different jobs. This information would be of the utmost importance to me.

I am sending herewith a bill for the analytical work up to the present date.

With kindest personal regards,

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.

KE 0003509

Dr. Robert A. Kehoe
Kettering Laboratory
College of Medicine
Cincinnati, Ohio

January 19, 1937

To Bunting Brass and Bronze Company
Toledo, Ohio

For 44 analyses at \$5.00 each \$220.00

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