

March 21, 1966

Robert J. M. Horton, M.D.
Chief, Field Studies Branch
Division of Air Pollution
Robert A. Taft Sanitary Engineering Center
4676 Columbia Parkway
Cincinnati, Ohio 45226

Dear Doctor Horton:

The men who yielded the high results among the group that was investigated in Cincinnati at the time of the Three City Lead Study have been found and interviewed. Specimens of blood and urine have been obtained and analysed.

Those who were in this elevated category in the 1955-56 Survey conducted by our staff, have been identified, their analytical reports have been separated out, and their medical records are available. These men were examined by our physicians according to an elaborate procedure, and their complete medical records are under study at present. We may or may not be able to locate these men, most of whom resided in Columbus or Dayton, Ohio, rather than in Cincinnati, but we shall make the effort, and in any event we shall report the results now available in the medical and analytical records.

I shall not wait until the latter task has been completed (as far as it can be) to report to you on the three men referred to in the first paragraph above. Accordingly, I am sending copies of the records obtained initially and recently. There is no means of tabulating these results collectively, or of making comparisons that have any other significance than that related to the individuals. You will see, however, that none of these men is unusual in any way.

It is of some significance, of course, that the concentration of lead in the urine of each man, previously, as well as now, is low. In addition, it may be observed that the analytical result obtained by the "dithizone" method in the early observations was appreciably higher in each instance than was its fellow analysed by the spectrographic method. We are in the habit (in diagnostic work) of looking at the two in terms of the analytical deviation, and of using them mainly to detect the wider ranges of analytical deviation. We do not regard any of these results as being beyond the "normal" distribution of frequencies, and in this instance considering the lower concentration of lead in the parallel samples, as well as the low value in the urine, we cannot consider any of these results to be surprising or aberrant.

The more numerous high values in the 1955-56 Survey are in a somewhat different situation, in that all but one of them, I believe (I shall not stop to check them at this time) have occurred among garage mechanics, whom we found to be a distinct group as long ago as 1935-36. There is nothing about this situation that should concern us unduly, since this group is known to have occupational exposure to lead entirely beyond that involved in their exposure to motor exhausts. Nevertheless, as I indicated above, we shall review this situation as completely and as carefully as it is possible to do at this time, and report to you in due course.

With best regards,

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Sincerely yours,