

May 16, 1967

William T. Davin, M.D.
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9701 West Grand Avenue
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Dear Doctor Davin:

I regret very much my long delay in replying to your letter of April 26. I've been forced to neglect my correspondence because of several absences from Cincinnati on professional activities of one kind or another, and because of the pressure of accumulated duties during the periods at home. This may seem a bit strange in view of my retirement from the Department and the Laboratory which I headed, but the fact remains that I've been unable, thus far, to cut loose from a variety of professional relationships that were cultivated over the years, so as to get at some long delayed study and writing.

I am pleased to comply with your request to send reprints of some of the publications of the Laboratory on lead and the prevention of lead poisoning. It is likely that these articles, which give abbreviated summaries of some fairly elaborate experimental undertakings as well as industrial surveys, may raise certain questions in your mind. If such is the case, I shall be glad to answer as well as I can, and if you should care to visit me (and other members of the staff of the Laboratory who have been associated with me in this work), I should be pleased to discuss some of the practical problems.

Let me comment on two points in your letter that seem to require some attention. One is a minor matter, perhaps, and may be merely a slip of the pen; you refer to the analysis of blood serum, but it is of physiological as well as practical importance that you realize that the whole blood must be analyzed, since a very large proportion of the lead in the blood is in the erythrocytes. Much depends upon this feature of the distribution of lead in the body in the interpretation of the meaning of the levels of lead concentration in the blood.

The other point has to do with the "toxic levels" of the concentration of lead in the blood. This is not what is meant, strictly speaking, by the threshold level in the blood. Actually there is no level of the concentration of lead in the blood, other fluids or tissues of the body which can be regarded as definitely toxic. Poisoning fails to occur when the blood level is below a certain point, but it cannot be counted on to occur above that certain point. All one can say is that the higher the level, the higher is the incidence of lead poisoning within the group of persons so involved. Something else, in addition to concentration, per se, triggers an episode of intoxication, and we do not, at present, know what that factor is. However, the reprints will convey much of what we have to say, and I hope they will answer your purposes.

Cordially yours,

Robert A. Kehoe, M.D.
Professor Emeritus of
Occupational Medicine

RAK:wp