July 11, 1935

Dr. Emery R. Hayhurst
Chief, Division of Hygiene
Department of Health
Columbus, Ohio

Dear Dr. Hayhurst:

I have your letter of June 29th with its enclosure of a form entitled "Supplementary Evidence in the Diagnosis of Lead Poisoning".

Having looked over the information again it seems to me quite generally satisfactory. With respect to the specific question which you raised as to the validity of analytical findings, I must reply that although I do not have specific information as to the adequacy of the various laboratories which you may have in mind, I still have very ~~careful~~ grave reservations as to the general usefulness of lead analyses in relation to the diagnosis. The interpretation of these data requires a very precise knowledge of the exact methods of analysis which are being employed, and of the detailed precautions which have been taken in the collection of samples. In my opinion, no one is in a position to make an interpretation of results obtained except the person who has studied the case and has also been responsible for the lead analyses. I have received a varied amount of correspondence during the past year reporting to me clinical cases with various types of lead analyses. The quantities of lead which have been reported have varied from 0 (which of course means a relatively unsatisfactory method) up to amounts so large as to be physiological impossible, (this meaning, of course, gross contamination of the samples). Very few persons seem to have much idea of the precautions which are required to obtain good samples, and of the physiological considerations which it is necessary to take into account in interpreting an analytical result. I am therefore, skeptical about the usefulness of such data as they are ordinarly obtained. Certainly, if you intend to set up a policy of regarding analytical findings as useful aids in diagnosis, you should clarify your position by stating definitely that (1) abnormal amounts of lead in blood, tissues, or excreta, are useful only in establishing the occurrence of abnormal lead exposure; and (2) that they can be regarded as useful only when accompanied by careful clinical study of the disease. In addition to that, you should establish a proper basis for reservation with regard to the accuracy of analyses obtained in various laboratories

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on the basis of the precise knowledge of the manner in which the analyses have been done. This, I believe, makes the problem rather too complicated for practical purposes. It is my opinion that you will be put in the position of accepting a diagnosis for medico-legal purposes in exactly the same manner that you would do it in your own practice, that is, on the basis of direct knowledge of the ability and judgment of the examiner.

If I can be of any further assistance to you in this matter, I should be glad to do so.

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.