January 16, 1970

Berwyn F. Mattison, M.D.
Executive Director
American Public Health Association
1749 Broadway
New York, New York 10019

Dear Doctor Mattison:

I'm undertaking to clear my desk before taking leave of Cincinnati, for what I hope will be the balance of the winter (since Mrs. Kehoe has had all she can take and much more than she should have taken of Cincinnati's winter thus far), I have read a fairly large number of reports and documents of one kind or another, which continue to come to me and accumulate until such time as I can get to them. One of these which I looked through fairly hastily, namely, the December 1969 issue of "The News" (APHA), referred to "Childhood Lead Poisoning." This, naturally caught my eye, and caused me to read it in its entirety. The material under this heading was generally highly informative and good, but it had in it one paragraph which is so incorrect as to arouse a very real concern in my mind, for the state of the technical knowledge of this matter here represented. I am deeply distressed by the prevalence of lead poisoning among the small children of our slums, for there are literally thousands of cases,* many of which go unrecognized. Since I and my Cincinnati associates have been dealing with this problem for thirty years or more, and since this Laboratory has developed and disseminated (mostly locally) the knowledge that has made it possible to understand this matter, I am, of course, sensitive to the ignorance concerning it, which is widespread in many parts of the country, even among pediatricians, and I can not refrain from pointing out the weaknesses of the "mass urine testing" which is recommended in paragraph 3 of the activities recommended. I think it necessary to caution the APHA that this is not, except under highly unusual conditions, the proper way to go about this matter.

In entirely competent hands, specimens of urine can be obtained from children, especially males old enough to follow the instructions of persons who are on the spot to tell them what to do. Specimens of urine collected in the usual manner from children or adults are not only useless, but are misleading as means of detecting the presence of unusual or excessive absorption of lead. Contamination of the specimens is always to be expected unless adequate care is taken to prevent it. I can give you chapter and verse on this but I shall not do so here, but merely state what experience has demonstrated amply.

Furthermore, the physiological variation in the concentration of lead in uncontaminated specimens of urine is a matter of such significance, that very few physicians (beyond the investigators of this matter) have any idea at all of its importance. It is true that this factor, as well as that of contamination, can be controlled, but only by experienced people or by people who follow detailed instructions, after being supplied with the proper equipment.

* In this country, I mean.

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On the other hand, the blood can be collected by a reasonably well-trained person - physician, nurse or technician - so as to present only a minor problem either of contamination or of physiological variability. This material is, therefore, the choice - and indeed the only choice for mass application - for purposes of fairly ready interpretation. It is strange that this fully demonstrated fact has been so little accepted, for the literature (when examined carefully) is sufficient to convince the most skeptical.

The analytical findings in either case are indicative only of danger, not of illness. What the detection of potential danger leads up to is not therapy - at least not medical therapy - but rather the institution of measures of prevention of further danger, so far as possible, and the investigation of individual cases, to learn whether therapy is required.

I think it unlikely that you are directly responsible for this news item, and I doubt if I should be talking to you about any of the details of this matter. However, having no alternative, I address you for what my remarks may mean to you and APHA. I do not like to see our colleagues misled by any agency, and certainly not by APHA which has the unenviable task of being completely "in the know" on all of the problems of public health. This one is no job for amateurs, for while it is one of the ugliest problems of public health in the country, the techniques which must be applied to it are fairly well developed despite their lack of satisfactory application (which, incidentally, where the problem is understood, is largely for economic reasons which we as a society ought to be ashamed not to overcome).

Sincerely yours,

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

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P.S. I can be reached by mail through my office, as usual.
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