

June 25, 1937

Mr. A. T. Erwin
Iowa State College
of Agriculture and Mechanic Arts
Ames, Iowa

Dear Mr. Erwin:

I am glad to reply, as well as I can, to the question in your letter of June 22nd.

In general there is no substantial danger of appreciable lead absorption from skin contact with watery solutions or suspensions of inorganic lead compounds. Some of the most soluble compounds produce very definite injury to the skin, but the absorption of lead through the skin is negligible, and this without regard to the presence of ordinary cuts and wounds. Obviously a surface completely denuded of skin might show somewhat greater absorption than the intact skin, but even here the inorganic compounds would tend to remain on the surface and the actual absorption into the body would be of little consequence. In the case of materials used for coating pottery, one is dealing with quite insoluble compounds of lead and in this instance neither damage to the skin or skin absorption is to be feared. It is quite apparent that such compounds deposited on the skin and beneath the fingernails may serve as a source of gross contamination of food materials, tobacco or any other object which is introduced into the mouth. However, reasonable care and cleanliness should serve to prevent damage or any contamination from this source. You refer in passing to the possible absorption of lead in the form of a spray. Any finely divided material suspended in the atmosphere as a spray could obviously be inhaled. The degree of lead absorption from such a factor would depend, of course, on the actual duration of exposure and the concentration of lead particles in the atmosphere. If the exposure were severe in magnitude and duration, lead poisoning could, of course, result. As a matter of fact, the inhalation of lead compounds in general is much more dangerous than any other means of exposure.

Mr. A. T. Erwin

I trust this will serve to answer your question, but if it leaves any point unanswered, I shall be pleased to give you any further information which I may have.

Very truly yours.

RAK:is

Robert A. Kehoo, M.D.