

termination of the exposure to lead, hastening removal of lead from the body through the use of edetate and dimercaprol, symptomatic therapy for encephalopathy, and the prevention of re-exposure to lead. Having stressed when to suspect pediatric lead poisoning, how to diagnose it, and how to treat it, the author should like to conclude by stating that, being entirely a man-made disease, it should be totally preventable! There are 19 references. -- Author's summary

- 472 Problems in Recognition of Lead Intoxication. M. R. Zavon.
Arch. Environmental Health 8, 262-265 (Feb. 1964).

In this discussion the author has surveyed the scene and attempted to highlight some of the difficulties which might be encountered in the diagnosis of lead intoxication. It should by now be obvious that lead intoxication is not a vague clinical entity with all sorts of odd manifestations. The clinical pattern of the disease tends to vary little from the description in this paper. The development of bizarre illness in a person exposed to lead should not automatically result in a diagnosis of lead intoxication. A history of exposure to lead should not result in the abandonment of all that is known of the proper way to arrive at a medical diagnosis. On the other hand, lead intoxication as a diagnosis should not be missed solely because of the failure to consider it as a possibility. -- Author's summary

- 473 Respiratory Response of Guinea Pigs During Acrolein Inhalation and Its Modification by Drugs. S. D. Murphy, D. A. Klingshirn, and C. E. Ulrich.
J. Pharmacol. Exptl. Therap. 141, 79-83 (July, 1963).

The respiratory response of guinea pigs inhaling low concentrations of acrolein was characterized by an increase in total respiratory-flow resistance, a decrease in respiratory rates, and an increase in tidal volumes. The magnitude of these effects increased with increasing acrolein concentrations studied, up to 1 ppm. The changes in respiratory function were reversible when the animals were returned to clean air. Atropine, aminophylline, isoproterenol and epinephrine partially or completely reversed the acrolein-induced increase in respiratory resistance, whereas tripeleminamine and pyrilamine had no effect. The mechanism of increased resistance during acrolein-inhalation appears to be one of bronchoconstriction mediated through reflex cholinergic stimulation. -- Public Health Eng. Absts.

INDUSTRIAL DUSTS

- 474 A Point-to-Plane Electrostatic Precipitator for Particle Size Sampling.
P. E. Marrow and T. T. Mercer.
Am. Ind. Hyg. Assn. J. 25, 8-14 (Jan.-Feb. 1964).

A point-to-plane electrostatic precipitator of simple design is described. It was developed as a particle size sampling instrument for use with the electron microscope. The standard operating conditions as well as special design and technical points are described and illustrated. Tests of the instrument have been made using the thermal precipitator as a standard. These comparisons have indicated no important limitation of the point-to-plane precipitator as a particle size sampler. Other advantages and disadvantages of the instrument based on the authors' experience are given. Most of these points are documented by photographs. None of the negative qualities of the sampler appear general or restrictive. Conversely, there are specific attributes which make the point-to-plane electrostatic precipitator a valuable, if not indispensable, tool in aerosol studies. -- Authors' abst.

03121464