

- 564 Ozone Poisoning. Serious Human Intoxication. F. J. Kelly and W. E. Gill.
Arch. Environmental Health 10, 517-519 (March, 1965).

A case of serious human ozone poisoning is presented. The inadequacy of relying on detection by odor on the part of even an experienced worker is well illustrated. After the onset of clinical manifestations progression to loss of consciousness can be alarmingly rapid. The response to inhalation oxygen may be of considerable diagnostic help as well as an effective therapeutic measure. Ten references are given. -- Authors' summary

- 565 Determination of Subtoxic Concentrations of Phosgene in Air by Electron Capture Gas Chromatography. L. J. Priestley, Jr., et al. Anal. Chem. 37, 70-71 (Jan. 1965).

The increasing use of phosgene as an industrial chemical demands instrumentation to monitor air continuously for this contaminant. A gas chromatographic method for measuring subtoxic concentrations of phosgene in air is described. The method utilizes an electron capture detector that is extremely sensitive to phosgene. The combination of a gas chromatographic column and the electron capture detector provides a high degree of specificity for phosgene. Hydrogen chloride concentrations as high as 1% in air do not interfere. This method could possibly be used as the basis for developing a continuous monitoring system for detecting and measuring phosgene in the atmosphere. -- Public Health Eng. Absts

- 566 Physiologic Effects of Chronic Exposure to Phosgene in Dogs. R. G. Rossing.
Am. J. Physiol. 207, 265-272 (July, 1964).

Recurrent exposure of dogs to phosgene gas (carbonyl chloride, COCl_2) produced a chronic obliterative bronchiolitis with a characteristic physiologic picture. Peak concentrations of the gas in the exposure chamber, at the flow rates used was calculated to be from 0.097 to 0.162 mg./liter (24-40 ppm). It was found that after an acute phase, in which changes in elastic behavior predominated, a definite increase in lower airway resistance was seen which persisted throughout the period of exposure. Accompanying this change the uniformity of distribution of inspired air was progressively disturbed as evidenced by nitrogen wash-out curves. In addition, microscopic changes suggestive of early peribronchiolar emphysema were seen. -- APCA Absts

- 567 Chelation by Calcium Trisodium Pentetate (DTPA) in Workers Exposed to Lead.
H. G. Brugsch, N. J. Colombo, and L. D. Pagnotto.
New Engl. J. Med. 272, 993-996 (May 13, 1965)

The goal of the industrial physician—to protect workers against lead poisoning through such measures as approved respirators, adequate plant ventilation and good personal hygiene—is not always obtainable. Even effective measures may be inadequate in the presence of unusually heavy exposures. In Massachusetts lead poisoning still occurs among workers employed in storage-battery plants, smelting plants, demolition work and painting, not to mention the high incidence of lead poisoning among children. Use of a chelating agent to remove lead from those suffering from or threatened by lead poisoning, therefore, still has a place in the therapeutic armamentarium. Data obtained on 12 workers exposed to lead given DTPA intramuscularly on an ambulatory basis over a short period indicated that this chelating agent adequately mobilizes lead and can be given without technical difficulty at the place of work. The second injection consistently produced a higher mobilization of lead. When injections were continued at short intervals a general drop-off in lead excretion was noted. Further investigation of the usefulness of such an ambulatory program in the management of workers exposed to lead or cases of mild lead intoxication seems warranted.

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