

- 377 General Immunological Response and Disease Incidence in Workers Exposed to the Action of Carbon Bisulphide. L. M. Kashin. *Gigiena i Sanit.* 30, 23-26 (June, 1965). Russian.

An attempt was made to determine the effect of small concentrations of carbon disulfide on immunological reactivity of the body and on morbidity with temporary disability in workers at a rayon factory. A drop in general immunological reactivity and a rise in morbidity rate observed in workers exposed to the action of carbon disulfide at concentrations both above and below the maximum permissible level (10mg./cu.m.). A relationship was demonstrated between the state of general immunological reactivity and that of morbidity with temporary disability; the morbidity rate dropped with a rise of body reactivity. -- Aerospace Med. Ab

- 378 Dynamic Investigation of Adrenal Cortex Function in Subjects with Symptoms of Benzol Poisoning. A. Cavalleri and A. Salvadeo. *Lavoro Umano* 17, 165-171 (April, 1965). Ital.

The adrenocortical function was studied in eight patients between 20 and 59 years of age with hematological symptoms of benzene poisoning, and compared with data from an equal number of normal subjects between the same ages. Basal values of 17-ketosteroids and 17-hydroxycorticoids excreted in the urine were found to be almost identical. The response to exogenous corticotrophin (ACTH) was lower in subjects with symptoms of benzene poisoning, but the difference was not statistically significant. These data indicate that no significant change in adrenocortical function occurs during benzene poisoning. -- Aerospace Med. Ab

- 379 Hazards of Insecticide Applications in Quebec. Z. Jegier. *Can. J. Public Health* 56, 233-238 (June, 1965).

A comprehensive two-year study was made commencing in 1962 by the Research Institute of Industrial Hygiene and Air Pollution of the School of Hygiene, University of Montreal, of use of insecticides throughout Quebec Province with emphasis on occupational health hazards at routes of entry such as oral, respiratory, and dermal in persons applying insecticides by outdoor and indoor spraying. Although indoor applicators were frequently exposed to above current threshold limit values, the maximum recorded exposure value was but 1.4% of the toxic dose (systox) because of the short duration of the spraying cycle (Durham and Wolfe procedure on dermal LD₅₀). Carelessness and unfamiliarity with the dangers of toxic materials were encountered throughout the survey. Indoor spraying in greenhouses and cattle barns, and its effect on professional exterminators in various areas, such as restaurants and hospitals that utilized lindane vaporizers were investigated. In outdoor applications, both ground applicators and aircraft pilots were surveyed for respiratory and dermal exposures. Respiratory exposures were calculated from: (1) air concentration values and an assumed lung ventilation of 444 liters per hour; and (2) from respiratory filter pad deposits. Dermal exposures were determined by absorbent pad collections (Berkow's method). Mean respiratory exposures to malathion, sevin, parathion, and Guthion during air blast spraying were 0.08, 0.29, 0.03 and 0.26 mg./hr., respectively. Pilots' mean respiratory exposure to endrin was calculated as 0.01 mg./hr. Only 11% of workers used respirators; 48% had no protection whatsoever. A hospital kitchen test on continuous vaporization of lindane disclosed a threshold limit value above 0.78 mg./cu.m. The necessity of vigilance during application and with regard to chronic rather than acute effects is indicated by the study. There are 11 references.

-- Public Health Eng. Absts.

- 380 An Approach to the Separation, Identification, and Determination of at Least Ten Organophosphate Pesticide Residues in Raw Agricultural Products. D. F. McCaulley. *J. Assn. Offic. Agr. Chemists* 48, 659-665 (June, 1965).

This paper describes the preliminary developments of a method that permits relatively rapid qualitative determination of residues of a number of common phosphorus pesticide compounds. Extraction is followed by vacuum sublimation, gas-liquid chromatography, and infrared analysis. A wide variety of vegetables and fruits can be analyzed by the general procedure.

-- Public Health Eng. Absts.

- 381 Sequelae of Acute Organic Phosphate Poisoning. I. R. Tabershaw and W. C. Cooper. *J. Occ. Med.* 8, 5-20 (Jan. 1966).

A group of 235 individuals reported by California physicians as occupationally poisoned by organic phosphorus insecticides during 1960 was selected for a study of possible sequelae. Follow-up was carried out three or more years after acute poisoning. Of the 235 individuals, 175 (74%) were located and 117 (50%) were examined. Of the 117 individuals examined, 114