

urine. Hydrofluoric acid burns have been effectively treated by infiltration with calcium gluconate followed by soaking in epsom salts.

-- Nuclear Sci. Absts.

- 91 Safe Handling of Fluorine Compounds. H.C. Miller.
Chem. & Eng. News 27, 3854-3857 (Dec. 26, 1949).

The author reviews the subject of handling of fluorine compounds of all kinds. In small quantities fluorine is necessary to health, and its action in preventing dental caries is familiar. In general, the ingestion of 10 mg. per day of non-acid fluorides is harmless. Reports of the harmful effect of high concentrations of fluorspar and cryolite are not well confirmed. Poisoning by non-acid soluble salts is rare. A lethal dose of sodium fluoride is five to fifteen grams. Below the harmful concentration, fluorides are eliminated from the system rather quickly. The chief dangers arise from the acids and the acid salts, with their well-known corrosive action on the skin, and still more from fluorine, the halogen fluorides, and the metal polyfluorides. Preventive and first aid measures are discussed, with reference to the Manufacturing Chemists' Association's Manual H-10 (Hydrofluoric Acid, Anhydrous and Aqueous. Handling and Discharge of Containers). The problem of protective clothing for use in high concentrations of fluorine and the halogen fluorides is unsolved because neoprene and similar materials burn in those gases. In general, organic compounds with the least fluorine are the most active, and some compounds such as sodium fluoacetate and isopropyl fluorophosphate, have a toxicity not due to the fluorine while compounds saturated with fluorine, like the freons, are harmless. When the hazards of fluorine compounds are fully realized and proper protective measures taken, they may be handled in safety.

- 92 Nitroglycerin Reactions among Pharmaceutical Workers. Anonymous.
Ind. Med. 18, 519-524 (Dec. 1949).

In the manufacture and handling of nitroglycerin for either explosive or therapeutical purposes, the workers are to some degree exposed to it. New workers are particularly susceptible, but temporary immunity is developed to low concentrations in most workers. The most noticeable symptoms are headache and blushing of the face. Warm weather enhances the incidence and severity of the symptoms. The use of alcohol greatly intensifies the effects. In departments of pharmaceutical plants where the exposure may be greatest, new employees are given exaggerated ideas of the danger by other workers, and the poor mental preparation magnifies the symptoms that might not be considered otherwise. Preventive measures are recommended under the headings of production, engineering, departmental, and medical control.

- 93 Tumors of the Bladder from Aromatic Amines. Statistical Considerations and Prevention. M. Barsotti and E.C. Vigliani. Med. Lavoro 40, 129-138 (1949). Italian.

Of 280 workers exposed during 1931-48 for more than a year to contact with benzidine, beta-naphthylamine, alpha-naphthylamine, 142 were examined. There were found 18 carcinoma, eight sessile tumors, seven with stems, and 58 congestions of the bladder. Benzidine and beta-naphthylamine have the