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air leakage from the drier should be prevented, and exhaust air should be washed with circulating aq. dil. alkali.

Yutaka Tsukano

1965 The effect of aluminum factory waste gases on the content of fluorides in soil and grass. Eugen Hluchan, Jan Mayer, and Emil Abel (Inst. Hyg. Bratislava, Czech.). *Pol'naphospodarsvo* 10(4), 257-62(1964). Fluorides were detd. by titration with $\text{Th}(\text{NO}_3)_4$ after steam distn. from acid solns. The upper soil layers near the Al factory showed fluorides in concns. up to 91.0 mg. %. The grass samples contained fluorides up to a value of 118.7 mg. F-/100 g. of dry matter. The content of F- in soil and grass declined with distance from the works. The contents of fluorides in dust reached 5.0 mg./100 g. of fresh grass.

Petr Skrabanek

Determination of some air pollutants by ultraviolet spectrophotometry. M. D. Manita. *Průdno Dopustimye Konsentracii Atm. Zagryazn.* 1963(7), 117-25. Naphthalene (I), acetophenone (II), and isopropylbenzene (III) can be detd. in air after dissolving in EtOH by measuring at 220, 244, and 212 mμ. About 0.1, 0.25, and 1.0 ml. of I, II, and III can be detd. Styrene (IV) in a mixt. with dimile can be detd. in air after dissolving in EtOH by measuring at 211.5 and 246 mμ. About 0.25γ IV/ml. can be detd.

Ivo Hynic

Morbidity and mortality in man caused by pulmonary cancer and its relation to the pollution of the atmosphere in the area of aluminum plants. N. N. Litvinov (Inst. Gen. Public Hyg., Moscow), M. S. Gol'dberg, and S. N. Kimina. *Acta Unio Intern. Contra Cancrum* 19(3-4), 742-5(1963)(in English). The concn. of benzo[a]pyrene in the air near 2 Al plants was 20 times as high as city air. Respiratory tract morbidity and cancer incidence correlated with air pollution.

Richard F. Riley

Asbestos exposure during naval vessel overhaul. William T. Marr (Long Beach Naval Shipyard, Long Beach, Calif.). *Am. Ind. Hyg. Assoc. J.* 25(3), 264-8(1964). Shipboard pipecovering and insulating during overhaul and repair is a hazardous trade. Chest x-rays can be misleading for controls as it takes 7 years for asbestosis to develop. There is a difference of opinion on the max. allowable concn. and the effects of long and short fibers. Workers exposed to dry insulation contg. asbestos should wear respirators.

Wm. MacL. Pierce

The effect of certain chemical compounds used in the food industry on the enzymic activity of the liver. A. Sporn and Ileana Dinu (Inst. Hyg., Bucharest). *Acad. Rep. Populare Romine, Studii Cercetari Biochim.* 7(1), 23-34(1964). The effect of BuOAc methyl-naphthylketone, ionone, Et gallate and salicylic acid in oral doses of 10 mg. every 2nd day, on the liver enzymes of rats was investigated. After 8 weeks of treatment, an increase of the aldolase, little change of the succinic dehydrogenase, and decrease of aspartic and alanine aminotransferase activities was shown.

BTJQ

Metabolic significance of some toxic solvents. E. Browning. *Ann. Occupational Hyg.* 3(4), 231-46(1961). Some important industrial solvents are described with special reference to the influence of their metabolic products upon body enzyme systems and the processes of detoxication. Solvents discussed in this review are benzene, toluene, xylene and related alkyl benzenes, chlorinated benzenes, chlorinated hydrocarbons, alics., glycols and glycol ethers, chlorinated alics., and CS_2 . Trichloroethanol, the chief metabolite of trichloroethylene, is now regarded as a better criterion of exposure than trichloroacetic acid.

John M. Bryant

Methane diisocyanate: a respiratory hazard? E. O. Longley (Dept. of Public Health, Sydney). *Arch. Environ. Health* 8(6), 898(1964). Of 12 employees in a railway workshop 7 developed asthmatic breathing, 11 had retrosternal soreness, 12 experienced chest constriction, 10 had cough persisting for 7-10 days, 2 had pain behind the eyes, 1 was depressed for 24 hrs., 2 had headache, 2 had nasal discharge, and 1 had insomnia after exposure to mist of methane diisocyanate (I) generated during application of rigid foam insulation. The applicators wore protective clothing and respirators, but the affected workmen were in other parts of the shop. Symptoms disappeared after 10 days.

Raymond Zehnpeinnig

Clinical and physiopathological aspects of asbestosis. Emilio Sartorelli (Univ. Milan). *Beitr. Silikose-Forsch., Sonderband* 5, 505-14(1963)(in German). The pathol. aspects of asbestosis are reviewed in relation to the phys. structure and chem. compn. of asbestos. New data are given on 74 patients with asbestosis, including changes in the O and CO_2 levels of the blood. Impairment in lung ventilation and diffusing capacity often produce markedly diminished working efficiency. 51 references.

W. C. Tobie

Functional condition of the parenchymatous organs of workers in the Kapron industry. A. A. Bashirov (Inst. Ind. Hyg., Kiev). *Gigiena i Sanit.* 29(4), 42-6(1964). Workers in a plant where they were exposed to the vapors of caprolactam and of dimile manifest the effects of the resultant liver damage by decreased ability to synthesize hippuric acid, increased urobilin excretion, and decreased prothrombin concns. The effects on

the arterial pressure and cardiac rhythm are thought to be secondary.

John Howe Scott

Occupational cutaneous reactions to epoxide and phenol-formaldehyde resins. Leslaw Grzegorzczak, Danuta Dolegowska-Potoczna, and Stanislaw Kowal (Wojewodzka Przychodnia Med. Pracy, Rzeszow, Poland). *Polski Tygod. Lekar.* 17(50), 1942-4(1962). Occupational dermatoses, eczema, and partial destruction of nails were observed in 28% of workers exposed to epoxide and phenol-formaldehyde resins. Almost all workers examd. suffered itching and burning pains of hands.

Jerzy Lange

Effect of naturally radioactive elements of the uranium-radium series on the hemopoietic system of uranium miners. Halina Dominas, Janina Boguslawska-Jaworska, and Wanda M. Dobryszczyka (Zaklad Lecznico-Zapobiegawczy, Kowary, Poland). *Polski Tygod. Lekar.* 18(16), 561-3(1963). The following characteristic data were reported on examg. the hemopoietic system of several U miners (no. of patients examd., polynuclear leukocytes, lymphocytes, erythrocyte vol., hemoglobin A_2 , and clotting time in min. given): employed <6 years, 1.1, 49.1, 45.3, 111, 6.8, 16; employed 6-10 years, 16, 49.5, 45.0, 108, 6.8, 17; employed >10 years, 26, 44.0, 50.0, 109, 6.1, 19.2; controls, 8, 58.3%, 33.0%, 104, 1.6%, 10.1.

Jerzy Lange

Determination of basic properties of lead dusts. Janusz Girczys. *Rudy Metale Niezelazne* 8(11), 447-50(1963). D. and sedimentation analysis of dusts present in Pb factories are described. The results gave some indications as to the effect of protective masks.

Z. Kurtyka

Practical importance of the test of the resistance of the skin to the action of alkali. A. Czernielewski. *Symp. Dermatol., Corpus Lectionum, Univ. Carolina, Prague 1960* 1, 84-5(Pub. 1962)(in French). Among foundry workers who showed a resistance to alkali on skin testing, 6 of 83 developed cutaneous changes, whereas 22 of 47 that were sensitive to alkali developed dermatosis. The resistance of the skin of individual subjects varied when tested periodically. At times when they were sensitive to alkalies the skin gave pos. tests to other allergens.

A. Dietz

Cement dermatitis. Ch. B. Calman. *Symp. Dermatol., Corpus Lectionum, Univ. Carolina, Prague, 1960* 1, 232-8(Pub. 1962)(in English). Allergic sensitivity to cement is due to chromate. The ratio of Cr(III) to Cr(VI) and its raw materials differs greatly. Much of the Cr(VI) may be derived from Cr(III) by oxidn. during manuf. In lab. expts. cement slurries with no chromate before heating, showed appreciable amts. after heating to 1400° in a Pt crucible. The potentially dermatitic properties of cement are alky., hygroscopic property, the particulate matter, and chromate allergy. Cement dermatitis does not readily clear up when the patient changes his work. When the patient has had dermatitis and recovered, he does not necessarily relapse when he returns to the same work. These points suggest that allergy to chromate is not the major factor in cement dermatitis.

L. Bakunowicz

Professional dermatoses and hexavalent chromium. L. I. Fandeev and S. Z. Borodina. *Sympt. Dermatol., Corpus Lectionum, Univ. Carolina, Prague, 1960* 1, 254-60(Pub. 1962)(in Russian and English). 32.4% of the workers of electroplating plants, who were exposed to CrO_3 , CrO_4^{--} , and $\text{Cr}_2\text{O}_7^{--}$, as well as alk. solns., suffered from allergic dermatoses and eczemas. CrO_3 was proved to be an etiological factor by compress skin tests (0.5% $\text{K}_2\text{Cr}_2\text{O}_7$) which were pos. in 54.8% of the exposed workers, but only in 10% of the rest.

G. Winkelsberg

The frequency of subclinical allergy to chromates in professionally exposed, compared to unexposed persons. H. Folesky. *Symp. Dermatol., Corpus Lectionum, Univ. Carolina, Prague, 1960* 1, 261-6(Pub. 1962)(in German). Persons who were professionally exposed to chromates (505 cement and concrete workers, 105 offset printers, and 25 galvanizers) and 110 controls were tested with the compress skin test (the exposed with 0.08-0.5% $\text{K}_2\text{Cr}_2\text{O}_7$ solns., the controls with up to 3.2% $\text{Cr}_2\text{O}_7^{--}$). A mean of 16.1% pos. reactions was found in the exposed group, and only 1.8% in the controls. All reactions visible after removing the compress were counted pos.

G. Winkelsberg

Occupational skin injury during the preparation of vitamin B₆. K. Kadlec and L. Hanslian. *Symp. Dermatol., Corpus Lectionum, Univ. Carolina, Prague, 1960* 1, 302-13(Pub. 1962)(in German). Patch tests were carried out on 15 occupational eczema diseased workers from a vitamin B₆ (I) factory. Out of all the raw materials and intermediaries used for the prepn. of I only a 0.3% alc. soln. or oily suspension of 2-methyl-3-nitro-4-methoxymethyl-5-cyano-6-chloropyridine (II) gave pos. patch tests. Exptl. eczemas were provoked by 1% II or II-Ag⁺. All the other compds. used in I processing as well as II in alk. soln. gave no exptl. eczema. It is concluded that occupational eczema in I factories is due to II. The use of alk. protective ointments is recommended.

BTJG

Prophylaxis of occupational dermatosis in the chemical industry. J. Lutowiecki. *Symp. Dermatol., Corpus Lectionum,*