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Literature Abstracts

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INDUSTRIAL HYGIENE FOUNDATION

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FOUNDATION FACTS

Foundation Facts is a monthly news-letter issued to industrial concerns holding membership in Industrial Hygiene Foundation. The Foundation is a non-profit association of industries for the advancement of healthful working conditions.

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Transactions for Annual Meeting

First copies of the Transactions for the Eleventh Annual Meeting of Members of Industrial Hygiene Foundation are being received from the printer. This important publication, which will be mailed to Foundation members within a few days, includes much new material of note, as

A preliminary report on a Foundation-supported study of industrial health departments, including administrative procedures, departmental relationships, costs...

Respiratory infections and their control in industry

Legal developments respecting occupational health, including health clauses in union contracts

State codes in industrial hygiene, including up-to-date tables summarizing code preventions in various states

The human factor in the design of machines

A report on beryllium, the metal with wide industrial uses which is suspected of toxic properties

A summary of the field researches conducted by the Foundation's staff during 1946.

Other highlights include the opening remarks by Andrew Fletcher, Chairman of the Foundation's Board and Executive Vice President of the St. Joseph Lead Company.....the keynote address by Admiral Ben Moreell, recently elected President and Board Chairman of Jones & Laughlin Steel Corporation.....the story of how one company controlled occupational diseases, told by R.H. Pass, President of Onondaga Pottery Company. A number of companies have already requested copies of these presentations for distribution to their top executives.

For maximum benefit, give the Transactions preferred circulation within your organization. (Members desiring copies in addition to their regular allotment may secure them at \$3.00 each.)

...Production Comes from People!...

- 170 Chromic Acid Mist. Anon. Safety Rev. (U.S. Navy), 4, 12 (Jan., 1947)

Attention is called to an earlier article (Abst. 603, June, 1946) describing the reduction of chromic acid spray in plating tanks. A constant check should be made on the effectiveness of the ventilating system. In the plating shop at Naval Air Training Bases, at Pensacola, a number of cases of chromium ulcers led to an investigation. Adequate lateral exhaust ventilation was found at the tanks, but when the cylinders were lifted two or three feet above the fluid level, fumes from the cylinders were apparently dissipated. The mixing vat, not equipped with lateral exhaust, also contributed to the fumes. Appropriate changes in procedure were made.

- 171 Foundry Dust. Anon. Safety Rev. (U.S. Navy), 4, 13 (Jan., 1947)

Attention is called to the necessity of periodic removal of dust from girders, conduits, catwalks, etc. Some Navy Yards use vacuum cleaning systems for its removal from such places. Analysis of deposited dust in a foundry showed 9.6% tin, over 2% each, lead, copper, and silica, 4.5% sulfur, and the remainder zinc, as oxides and sulfides. Such a composition would call for protection against metal-fume fever.

Editor's Note: Studies by Drinker and his co-workers indicate that metal fume fever is caused only by freshly formed fume. It is questionable whether dust of the type described could be resuspended in the air in a form capable of eliciting fever response.

- 172 Wet Sandblasting Operations. Anon. Safety Rev. (U.S. Navy), 4, 11 (Jan., 1947)

It is not always realized that wet sandblasting involves a silicosis hazard. Control methods should include segregation from non-hazardous working areas, and use of approved respiratory protective equipment. In the wet-blasting shed at one of the Naval Shipyards, between 5 and 10 m.p. cu. ft. were found, and respirators were not worn. Subsequent recommendations called for the use of regulation sandblaster hoods and appropriate respirators.

- 173 Silica. Ind. Health Bull., New Jersey Dept. of Health, Div. of Ind. Health, 1, 11 pp. (1946)

This pamphlet presents the essential facts about the silica hazard and silicosis, including incidence, etiology, clinical course, diagnosis, prophylaxis, therapy (including a note on aluminum therapy) and medico-legal aspects.

- 174 The Pathological Effects of an Instantaneous Dose of Radiation. S. Warren. Cancer Research, 6, 449-453 (1946)

Injuries produced by heat, short-wave radiation, and neutrons resulting from the atomic bombing of Hiroshima and Nagasaki are described. No deleterious effects (as from residual radioactivity) were observed in persons who entered the bombed areas soon after the explosion and remained there. — C.A.

- 234 Effect of Asbestos, and of Asbestos and Aluminum, on Lungs of Rabbits.
E.J. King, J.W. Clegg and V.M. Rae. Thorax, 1, 188-197 (Sept., 1946)

The purpose of the experiments described by King and his associates was to test whether short fiber asbestos is less damaging in the lungs of the rabbit than is long fiber asbestos and whether metallic aluminum will suppress any toxic effect produced by fiber asbestos. Four groups of animals were tested. All groups showed a foreign body reaction in the lungs. In animals in the long fiber experiments there developed a nodular reticulosis comparable with the experimental silicotic nodule. In animals in the short fiber experiment there developed a diffuse interstitial reticulosis. The addition of aluminum did not afford any benefit in any group. — J.A.M.A.

- 235 A Crystalline Antibacterial Substance from the Lichen Ramalina Reticulata.
A. Marshak. Pub. Health Repts., 62, 3-19 (Jan. 3, 1947)

A crystalline substance has been isolated from the lichen ramalina reticulata, with a melting point of 191-192° C. and an empirical formula of $C_{16}H_{14}O_6$. It can be administered subcutaneously in oil, daily, at a rate of 10-20 mg. per 350-400 g. guinea pig for a period of three weeks without obvious toxic effects. When so administered to guinea pigs infected intraperitoneally with human tubercle bacilli of the strain H37RV, it appears to retard the progress of the disease. -- Author's conclusion

Public Health

- 236 New Aspects of the Food Poisoning Problem. D.L. Husseman and F.W. Tanner.
J. Am. Diet. Assoc., 23, 16-21 (Jan., 1947)

The number of cases of food poisoning caused by bacteria have more than doubled in the last five years. The five organisms most commonly responsible are: staphylococcus, streptococcus (septic sore throat), salmonella, the shigella (dysenteries) and Eberthella typhosa (typhoid fever). Prevention of food poisoning includes the following factors: (1) highest standards of cleanliness for personnel, equipment and foods; (2) stored foods should be kept at refrigeration temperatures at all times (50°F. or below); (3) training of food handlers to avoid contamination. Once toxins are formed in food there is no reliable method of removing them. The article is illustrated by numerous instances of food poisoning and references are provided.

Editor's Note: The problem of food poisoning is a concern of companies which serve food to employees from cafeterias, lunch rooms or lunch carts.