



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL . . . decisions and trends

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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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Annual Index for Monthly DIGEST

The Annual Index covering the 1948 issues of the monthly INDUSTRIAL HYGIENE DIGEST is being mailed to Members and Subscribers with the March DIGEST. Additional copies available.

Symposium on Smog

A Symposium on Smog will be held in connection with the annual meeting of the American Medical Association in Atlantic City, June 6-10. This symposium will be of direct interest to Foundation Member companies. Hence it is suggested that Members designate physicians to represent them. The Foundation will participate in the program with W. C. L. Hemeon, Engineering Director, speaking on control measures for combating atmospheric pollution. The program will shortly be mailed to physicians associated with Foundation firms.

Tuberculosis in Industry

Tuberculosis in Industry, latest Foundation publication, will be released to Members and Subscribers early in April. This bulletin, No. 9 in the Medical Series, gives the proceedings of a panel held at the Medical Conference last November. Other publications mailed to members recently were:

Summary of the Ceramic Conference, held at the last annual meeting; and

Effects of Medical Care Programs in Industry, an unpublished section of a study by the National Planning Association.

Program for Conference on Industrial Ophthalmology

The preliminary program for the Conference on Industrial Ophthalmology, to be held at Mellon Institute, Pittsburgh, on May 16, 17 and 18, will be sent to Members and Subscribers in a few days. The Conference is sponsored jointly by the Foundation and the School of Medicine, University of Pittsburgh. Members interested in industrial eye problems are invited to send representation.

Diet--Dictatorship or Democracy?

Walter J. Murphy, Editor of Chemical Engineering, points out that most of the world's population suffers from undernutrition. Only seven nations raise enough food to maintain themselves on adequate diet levels: The United States, Australia, Canada, Denmark, New Zealand, Norway and Switzerland. "Not a dictatorship in the lot," Mr. Murphy observes, adding, "There has never been a democracy where there has not been an abundance of food.... Recent clinical experiments show that hunger profoundly affects personality."

records, but is not expected to draw conclusions. For instance she can say that a man's breath smelled of alcohol, that he was staggering, that he spoke incoherently, but should never say that he was drunk.

- 288 Pulmonary Affections of Occupational Origin. R. T. Johnstone. Am. Rev. Tuberc., 58, 375-392 (Oct., 1948).

(1) The actual incidence of pulmonary damage resulting from an exposure to the various industrial dusts and chemicals is rare. (2) Healthy adults reveal variations in the roentgenograms of their chests. Caution must be exercised in interpreting these variations of lung markings. (3) Minimal or even moderate fibrosis in itself is not disabling. (4) The majority of all industrial dusts are inert because they are incapable of producing a reactive, proliferative fibrosis. Even after years of exposure to those benign dusts, the resulting fibrosis is not progressive. It does not lead to disability or infection. (5) In estimating the possible effects of any given industrial substance, it is necessary to know its chemical nature. (6) It now appears that certain silicates which were once considered as inert may become noxious when subjected to high temperatures. (7) Certain metals when subjected to high temperatures, liberate their oxides which may produce chemical pneumonitis. (8) An industrial environment per se does not induce tuberculosis.

-- Author's summary

- 289 Pathogenesis of Industrial Pulmonary Disease. W. Machle. Radiology, 50, 755-759 (June, 1948)

A brief review is given of the pathological physiology of subacute and chronic diseases of the lungs resulting from agents in particulate state and of low solubility. Some of the chemical factors are reviewed and attention is called to the fact that the difference between active and inactive dusts has not yet been defined on other than an empirical basis.

- 290 Central Mining--Rand Mines Group. Health Department. Report for the Year 1947. A. J. Orenstein. (Johannesburg, South Africa).

This report like its predecessors summarizes morbidity and mortality data for all workers in the Rand Mines. Death rates in the group have been approximately stable since 1939. Pneumonia rates are slightly less than the previous year as is tuberculosis. There were 58 cases of silicosis recognized (0.64 per 1000) and 4 deaths (0.05 per 1000). Six cases of heat stroke occurred with 3 deaths. Feeding costs are quoted--1947 costs are slightly below 1946. The cost per native per annum is approximately \$55.00.

-- J. Ind. Hyg. & Tox. (Jan., 1949)

- 291 Some Considerations of the Roentgen Diagnosis of Silicosis and Conditions That May Simulate It. E. P. Pendergrass and A. G. Robert. Radiology, 50, 725-745 (June, 1948).

(1) Attention is directed to the fact that a fluoroscopic and roentgenographic examination of the chest is the most precise method available for demonstrating in the living individual the pathological changes produced within the lungs by the pneumoconioses. The necessity, however, for corre-

lating the roentgen findings with all other essential data before making a definite diagnosis is emphasized. (2) "Pneumoconiosis" is defined as a broad generic term to include all forms of pulmonary reaction to dust lodging within the lungs. The rationale for further subdivision into the specific (silicosis and asbestosis) and non-specific or benign pneumoconioses, with a brief review of the etiology, pathology, and roentgen criteria for the diagnosis of each, is explored. (3) The roentgen manifestations of simple silicosis and of silicosis complicated by the presence of coexisting infection, are detailed. The demonstration upon the roentgenogram of a generalized nodulation throughout the lungs is considered as fundamental to the diagnosis of silicosis. (4) The differential diagnosis of silicosis and other conditions which may be productive of nodular densities within the lungs is reviewed.

-- Author's summary

292 Anthraco-Silicosis. W. J. Corcoran. Radiology, 50, 751-754 (June, 1948)

This paper presents observations of the author made in the course of examining roentgenograms of about 1000 cases of anthraco-silicosis each year over a period of 25 years. The importance of a corroborative history in making a diagnosis is stated. The value of the fluoroscope in diagnosis is indicated. The author believes that infection super-imposed upon anthraco-silicosis is the principal cause of permanent disability rather than anthraco-silicosis alone. The third stage of the disease may produce disability alone, but it is in this stage that infection occurs most often. In the author's experience no first stage has progressed to the third stage when removed from the disability, but he suggests that roentgen studies be made of such cases as long as they live to answer the question more definitely.

-- From J. Ind. Hyg. & Tox. (Jan., 1949)

293 Myelogenous Leukemia Resulting from Benzol Poisoning. J. D. Sacca. New York State J. Med., 48, 1619-1620 (July 15, 1948).

A case is presented of a man exposed continually to benzol for four years, developing finally, a syndrome which was clinically typical of myelogenous leukemia with corroborative blood findings. In view of the literature cited, there appears to be a strong correlation between the chronic exposure to benzol and the leukemic process developed in this otherwise normal white man.

-- Author's conclusion.

294 A Much Delayed Case of a Pathological Condition of the Blood, Lymphosarcomatous in Type, Caused by Benzene. J. Bousser, R. Neyde and A. Fabre. Bull. et Mém. Soc. Med. Hopit. de Paris, Nos. 32-33. 1000-1004 (1947) French.

A man aged 42 was suspended from work at spraying a paint containing benzene when a periodic examination showed a blood picture which was slightly abnormal. After withdrawal to other work the blood condition soon returned to normal. Three and one-half years later he was found to have generalized enlarged glands. A diagnosis was made of aleucemic lymphomatosis, ascribed to benzene, since benzene was soon after detected in the blood. The spleen was enlarged, but not the liver. There was severe digestive disturbance. Still the blood picture was hardly disturbed. Rapid cachexia developed, with mild, but definite hyperglycemia. After death a large