

**INDUSTRIAL HYGIENE NEWS LETTER**  
**Current News of Official Industrial Hygiene Activities**

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**CONFERENCE OF THE COMMITTEE OF SAFETY AND HEALTH**  
**IN THE PULP AND PAPER INDUSTRY**

A Conference of the Safety and Health Committee in the Pulp and Paper Industry, held in Washington on August 15, at the invitation of the Division of Labor Standards, U. S. Department of Labor, discussed a proposed drive to reduce accidents and health hazards in this industry. The procedure will be similar to that followed in the meat packing drive reported in the May 1944 Industrial Hygiene News Letter.

Among the cooperating agencies are the American Mutual Alliance, American Red Cross, American Paper and Pulp Association, American Pulp and Paper Mill Superintendents Association, American Standards Association, U. S. Department of Labor (Bureau of Labor Statistics, Children's Bureau, Women's Bureau, and Division of Labor Standards), U. S. Department of Commerce, U. S. Department of Agriculture (Forestry Service), International Brotherhood of Paper Makers, International Brotherhood of Pulp, Sulphite and Paper Mill Workers, International Paper Company, National Safety Council, National Bureau of Standards, National Conservation Bureau, National Fire Protection Association, War Production Board, U. S. Chamber of Commerce, and the Federal Security Agency, U. S. Public Health Service.

The paper and pulp industry needs concerted action to lower the accident frequency and severity rates. It employed approximately 146,000 workers as of June 1944, and had an accident frequency of 26.3 for 1942, 30.4 for 1943, and approximately 27.4 for the first 3 months of 1944. There were approximately 10,900 permanent partial disabilities, or deaths during 1943, or, roughly, 1 out of every 17 employees suffered a disabling injury during the year, and 1 out of every 3,550 died or suffered some permanent disability. This industry, in addition to having a frequency 40 percent above the all-industry average, has a high severity rate. Its severity rate in 1942 was 2.4, which resulted in a total of direct time-loss plus charges for deaths and permanent disabilities of 8,000,000 man-hours, an average of 100 man-hours per disability injury.

It is proposed to make a concerted drive in this industry for a 3-month period, commencing October 1. All cooperating agencies will combine forces to achieve a 40 percent reduction in the over-all accident frequency for this industry.

Two publications have been developed for the use of the industry in the 3-month drive. "Organizing for Safety" points out to management the industry-wide problem and the specific plant problem, and how it is proposed to assist them with these problems during the 3-month program as well as permanently. "The Control of Accidents" describes industry's problem in accident prevention as well as fire prevention and some of the solutions that have been found by plants in the industry.

The Industrial Hygiene Division of the U. S. Public Health Service has been requested to notify each State health department of the drive and to supply information as to how the State health departments can best be utilized in the drive. The Division will also render research services on health preservation in the industry, and prepare educational material regarding specific occupational disease hazards.

#### THE "DETROIT PLAN" OFFERS A HEALTH PROGRAM FOR SMALL INDUSTRIES

A campaign for the advancement of industrial health in the small industries of the Detroit area is being sponsored by the Wayne County Medical Society. The main objective is to provide emergency care in these plants and eventually to convince the management that a health program is not costly but economically profitable, even though it necessitates an initial expenditure for first-aid stations and various equipment.

When a sufficient number of doctors have notified the Society of their availability to assist in the program, letters will be sent by the Medical Society to industries in the area employing 25 to 1,000 workers, that do not employ a full-time plant physician. The City of Detroit Department of Health has offered to render service or advice regarding occupational diseases found in these plants.

The plan proposes meetings at regular intervals, in each plant, of the president or plant manager, the plant doctor or his appointed representative, the plant or visiting nurse, the first-aid man, the director of the safety committee, a representative of the employees, and the personnel or employment manager. Suggested topics for these meetings include: (1) Disabilities from accidents; (2) First aid at the plant; (3) Physical examination and health of the worker; (4) Non-compensable illnesses such as colds and infections or surgical disabilities; (5) Cooperation of the family physician in cutting down loss of work days; (6) Ventilation and sanitary conditions in the plant; (7) Nutrition of the workers and food conditions; and (8) Contagious diseases and cooperation with the public health department.

#### DERMATITIS CAUSED BY PHENOL FORMALDEHYDE RESIN

Unpolymerized phenol formaldehyde resin used to glue together paper tubes employed in the launching of rocket bombs from airplanes caused an outbreak of dermatitis in a Massachusetts plant. The hands and shoes

of the workers were soiled with the resin glue as it spread over the paper while the paper was being rolled into a cylinder. Of the 150 workers employed on the operation, 78 developed dermatitis and out of 480 men hired, only 180 remained on the job. The remaining 300 left because of the dermatitis which they developed or because they feared the disease. Production was cut to less than 10 percent.

Investigations made by the Dermatoses Section of the Industrial Hygiene Division, U. S. Public Health Service, in cooperation with the Division of Occupational Hygiene, Massachusetts Department of Labor and Industries, showed the glue to be the cause of the dermatitis. It was recommended that: (1) Workers should wear sleeves, aprons and gloves made of fabric impervious to the glue, gloves being changed at each half shift; (2) Wash stands should be placed at strategic places to enable the workers to frequently wash the soiled parts of the skin; (3) A special cleanser was recommended, as ordinary soap was ineffective; and (4) Methods of treatment were recommended.

#### A NEW OUTBREAK OF DERMATITIS REPORTED DUE TO CHEMICAL IN ANTIMILDEWED FABRICS

A large percentage of workers in a plant manufacturing jungle hammocks to be used in the South Seas, developed dermatitis on the forearms and bare legs. Investigation by the Public Health Service showed that a chemical used to prevent mildew in the fabric of the hammocks was the cause of the dermatitis. Wearing of sleeves and stockings to protect the arms and legs from contact with the fabric as it was sewed on the machine was recommended to prevent further occurrence of the skin condition.

#### EXHAUST GASES FROM MOTOR BUSES

An appreciable amount of irritating gases, as well as carbon monoxide, was shown to be present in the exhaust gas of certain motor buses, by a study made by the Division of Industrial Hygiene, Los Angeles City Health Department, in cooperation with the California State Bureau of Industrial Hygiene. Although the concentration of carbon monoxide was low in this particular study, the irritating substances showed a high concentration. Experiments indicated that formaldehyde may be generated by an inefficiently operating bus motor. Conditions under which irritants were more frequently noted included use of an inferior oil, worn-out buses, and overloading of buses, as well as poor ventilation of the buses.

#### PHENYLMERCURIC SALICYLATE MAY BE AN INDUSTRIAL HEALTH PROBLEM

Proposed use of phenylmercuric salicylate as a fungicide in protective coatings for electronic devices resulted in a request for data on the toxicity of this compound from the Los Angeles City Division of

Industrial Hygiene. Although information concerning the toxicity to man from exposure to this substance is not available, studies of analogous phenylmercuric compounds have shown them to be skin irritants and, when inhaled in sufficient quantities, systemic poisons. Recommendations for control were based on these data and air samples will be collected periodically to check the efficiency of the control measures.

#### PHOTOSTAT AND BLUE PRINT ROOM HAZARDS

After employees had complained of nausea and headache, an investigation by the Los Angeles City Division of Industrial Hygiene revealed that carbon monoxide was coming from unvented gas burners used in drying blue prints. Excessive heat was also generated by the powerful ultraviolet lamps, as well as by the gas burners. No ventilation was provided except by windows. Venting the gas burners and providing mechanical room ventilation were recommended.

#### A DENTAL PROGRAM IS AN ESSENTIAL PART OF A COMPLETE MEDICAL PROGRAM

Dental factors contributing to the loss of work because of sickness and injury, merit the serious attention of industrial leaders. To assist in solving this problem, the Missouri State Board of Health is offering the advisory assistance of an industrial dental consultant to industries in the State. A bulletin has been sent to industrial plants explaining: (1) The kind of dividends a dental health program can be made to pay; (2) Types of dental programs now in use in industry; (3) How dental infection may be discovered most effectively among workers; (4) How the dental program may be correlated with the medical program; and (5) Minimum essentials of a good industrial dental program.

#### LACK OF SUFFICIENT CLOTHING CAUSES DERMATITIS OUTBREAK IN SYNTHETIC RUBBER PLANTS

Cases of dermatitis occurring in synthetic rubber plants caused the Rubber Reserve Company and interested private companies to request an investigation by the U. S. Public Health Service, in cooperation with the State health departments of Louisiana and Texas. It was decided that the high incidence of contact dermatitis was probably due to the fact that the workers wore little clothing during hot spells. Prevention of contact of the materials with the skin was recommended.

#### DERMATITIS IN QUARTERMASTER DEPOT FOUND DUE TO OIL YELLOW

Oil Yellow, a dye used in mosquito netting, was found to be the cause of an outbreak of dermatitis in an Army Quartermaster Depot. Copper Naphthenate, an antimildew, was a contributing factor.

#### ANNUAL CONFERENCE OF NEW ENGLAND INDUSTRIAL NURSES ASSOCIATION AND INSTITUTE ON INDUSTRIAL NURSING TO BE HELD IN BOSTON

The Twenty-ninth Annual Conference of the New England Industrial Nurses Association and Institute on Industrial Nursing will be held at

the Hotel Statler, Boston, October 13-15. The Institute on Industrial Nursing, which will precede the Conference, is for the first time being made an all-day session. Topics to be discussed at the Institute include, expediting first-aid cases, nursing trends, occupational hygiene from the physicist viewpoint and from the medical viewpoint, newer medical technique and procedures, and a safety and style show.

#### AMERICAN ASSOCIATION OF INDUSTRIAL NURSES PLANS MEMBERSHIP DRIVE

A drive for new members will be launched on October 1 by the American Association of Industrial Nurses. This national association was organized in 1942, in recognition of the growth and expansion in the field of industrial nursing. Its expanding action program is centered in a sharing of common problems by all nurses in industry, and in aiding these nurses to broaden their usefulness to industry.

In this drive the Association appeals to industrial management, physicians, and safety engineers, as well as to nurses, to bring word of this Association to their nurses. A postal card inquiry will at once furnish complete information to a prospective member. Address Mrs. Gladys Dundore, R.W., Executive Secretary, 54 West 10th Street, New York 11, N. Y.

#### ARMY-NAVY "E" AWARD WITHHELD BECAUSE OF HEALTH CONDITIONS IN PLANT

The Army-Navy "E" award was temporarily withheld in a plant in the East manufacturing atabrine, because of a high incidence of dermatitis. Consideration of the wastefulness of production obtained at the expense of the safety and health of war workers, is a recent development in making these awards.

A survey of the plant, made at the request of the Awards Committee, by the Industrial Hygiene Division, U. S. Public Health Service, showed that the management of the plant had made an earnest effort to control the hazard and reduce the incidence of dermatoses. It was pointed out that atabrine sensitizes the worker's skin but if certain precautions are followed, no difficulties should be encountered. It was recommended that workers who contacted dermatosis be retained on the job until they had become "hardened" and that proper use be made of the protective equipment provided and certain types of cleansers and protective ointments be used.

#### SEATTLE PLANS WARTIME CONFERENCE ON INDUSTRIAL HEALTH

The Seattle Safety Council has announced a 1-day conference on industrial health to be held at the Seattle Chamber of Commerce on August 30. The afternoon session is devoted to a symposium on "The Community Contributes to Industrial Health." Distinguished speakers are scheduled for the dinner and evening sessions and the program will be summarized by the Governor of the State of Washington.

## STATE ACTIVITIES

ARKANSAS: The Arkansas State Board of Health has announced a variety of public health nursing services which have been made available to employees of the plants in the Bauxite industrial area through the Pine Haven Health Center, a sub-station of the Saline County Health Department. Employees may visit the Public Health Nurse's Office for advice regarding health problems, advice and assistance in securing correction of physical defects, participation in classes and group discussions, and securing immunization against certain contagious diseases. The nurses will also make home visits to sick and injured workers upon request.

MASSACHUSETTS: A survey was made of the physical conditions and nutritional habits of all the workers in two well-controlled dial painting establishments, where radon breath analyses and blood counts of workers are collected routinely. The purpose of the survey is to correlate the material with the laboratory findings in order to judge the efficacy of the present preventive measures.

NEW JERSEY: A program to study and improve the health of workers in the food processing and related agricultural industries, has been initiated by the Bureau of Industrial Health, New Jersey State Department of Health. Information will be obtained regarding the medical facilities and plant health programs in cannery, fertilizer, flour, feed and other industries. The Bureau is also assisting the staff of the State Bureau of Venereal Disease Control in its clinics for agricultural and food processing workers.

A monthly "Industrial Health Bulletin," designed to appeal to plant personnel, has been inaugurated by the Bureau of Industrial Health. Mimeographed copies will be distributed to approximately 2,500 plants and individuals in the State. The first issue will present measures for preventing heat illness.

The Bureau assisted the New Jersey State Bureau of Local Health Administration in a study of atmospheric pollution in the Gloucester City area.

NORTH CAROLINA: The Industrial Hygiene Division, North Carolina State Board of Health, is carrying on a tuberculosis survey in the cotton mills of Wake County.

PENNSYLVANIA: The Dental Consultant of the Bureau of Industrial Hygiene has received a request from one industrial section of the State for information regarding the advisability and costs of a mobile dental unit that could be used by a group of plants collectively employing 900 to 1,000 persons. This Bureau, through its Dental Consultant, had submitted a dental program to several of these plants, together with the probable cost of equipment and personnel, and it was found that the idea of a group plan would be more desirable.

It is the contention of these manufacturers that a full-time dentist, a hygienist, and even a medical examiner could be attached to such a mobile unit and periodically visit each plant in that area subscribing to the expense of its operation.

WASHINGTON: Industrial health is being highlighted during August in the City of Seattle, through cooperation of the Industrial Hygiene Division, State Department of Health and the Seattle Safety Council. The plan includes radio and newspaper publicity, together with exhibits in retail stores.

In planning the program, there was found duplication of inspections and conflicting recommendations for better health control made by about 20 different Federal, State and local agencies. The Division of Industrial Hygiene has been asked by representatives of all these agencies to serve as an information bureau to direct management and labor to the agency best prepared to help them in their problems and to assist in planning the coordination of services of these agencies.

A "Guide to Basic Medical Service Records in Industrial Plants," has been prepared by Miss M. Grace Watson, Industrial Advisory Nurse, to be used to stimulate better record keeping in industrial medical units. The guide includes individual, shift, and monthly summary record forms together with instructions and suggestions for their effective use.

#### PERSONNEL

Mr. Norman Scott, Industrial Hygienist, has recently joined the Division of Industrial Hygiene of the Washington State Department of Health. He was formerly chemical engineer in the Special Hazards Division of the Associated Factory Mutual Fire Insurance Company in Boston, Massachusetts.

Mr. E. E. Diddams has been appointed Industrial Sanitarian of the industrial hygiene staff of the Seattle City Health Department. He served for nearly 4 years as Senior Sanitarian of the Spokane County Health Department.

Assistant Industrial Hygiene Engineer (R) Paul F. Rezin, formerly assigned to the Michigan Department of Health, has been transferred to California for duty with the Los Angeles City Department of Health.

Assistant Sanitary Engineer (R) Yale Rosenfeld has been transferred from the Los Angeles City Department of Health to the Michigan Department of Health, for duty in the Bureau of Industrial Hygiene.

Mr. Howard E. Bumsted has replaced Mr. M. F. Yantzi, Industrial Hygienist with the Kansas Division of Industrial Hygiene.

Mr. Herbert G. Dyktor, formerly with the Michigan Bureau of Industrial Hygiene, will head the Bureau of Industrial Health of the Cleveland City Division of Health, beginning September 1, 1944.

Passed Assistant Sanitary Engineer August T. Rossano, Jr. was transferred on August 1 from the California Department of Public Health to the Colorado Board of Health, as Director of the Division of Industrial Hygiene.

Mr. B. W. Thorngate, Ceramic Engineer for the North Carolina Division of Industrial Hygiene, has resigned to accept a position in Florida.

Miss Maxine Smith has been appointed Junior Chemist for the North Carolina Division of Industrial Hygiene.

Mr. W. M. Stewart, who has been a chemist with the California Bureau of Industrial Health, has received a commission in the Army of the United States, and will be stationed at Baltimore in the Army Industrial Hygiene Laboratory.

Miss F. C. Hunter, who has been receiving training in Public Health Education at the University of Michigan, has returned to the California Department of Public Health, and is assigned to the Bureau of Health Education in San Francisco, where she will be engaged in industrial health education.

THE "MANUAL OF INDUSTRIAL HYGIENE" WILL BE SENT TO CHINA

The China Medical Board, Incorporated, of the Rockefeller Foundation, has requested permission to have a limited photo-offset edition, not more than 5,000 copies, of the "Manual of Industrial Hygiene" printed and distributed in China. Permission was granted by the Industrial Hygiene Division through the publishers, W. B. Saunders Company. To date, 6,000 copies of this book have been distributed in America and an additional 5,000 are being printed.

CORRECTION

The price of Workers' Health Series No. 12 and 13, was incorrectly stated on page 6 of the July issue of the News Letter. The price is as follows:

- No. 12. Let's See. 5¢ each; \$1.50 per 100; \$12 per 1,000.
- No. 13. Below the Belt (Hernia). 5¢ each; \$1 per 100; \$10 per 1000.

They may be obtained at the U. S. Government Printing Office



COOPERATIVE ACTIVITIES OF THE U. S. PUBLIC HEALTH SERVICE AND STATE  
DIVISIONS OF INDUSTRIAL HYGIENE

Dr. Louis Schwartz, in cooperation with Dr. I. R. Tabershaw of the Massachusetts Division of Occupational Hygiene, investigated dermatitis hazards in the Massachusetts fisheries.

Passed Assistant Surgeon (R) Isadore Botvinick is making a study in the control of epidemics of ringworm of the scalp that is occurring in many cities. A control study has been started in Hagerstown, Maryland.

Public Health Nursing Consultant F. Ruth Kahl acted as coordinator of activities in the workshop of industrial nursing of the University of Minnesota. Miss Kahl visited the Office of Industrial Health, New York City Department of Health, and the Massachusetts Division of Occupational Hygiene, to consult with the nurse regarding the industrial nursing activities.

Senior Sanitary Engineer J. J. Bloomfield and Victoria M. Trasko, Statistician, reviewed the industrial hygiene programs in the Syracuse Branch Office of the New York Division of Industrial Hygiene, State Department of Labor, and in the New York City Office of Industrial Health. The latter is a cooperative unit of the New York City Department of Health and New York State Department of Labor.