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INDUSTRIAL HYGIENE NEWS LETTER		
Current News of Official Industrial Hygiene Activities		
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INDUSTRIAL HYGIENE SEMINAR FOR ENGINEERS AND CHEMISTS

The Industrial Hygiene Division, U. S. Public Health Service, has arranged a 5-day seminar for engineers and chemists engaged in industrial hygiene work in Federal and State agencies to be held May 4-8, 1944, in St. Louis, Missouri, preceding the "War Conference on Industrial Health." Lectures will be given by members of the staff of the Industrial Hygiene Division. All lectures will be held in the Auditorium of the St. Louis Health Division, Municipal Courts Building.

Industrial hygiene personnel in a few industries will be included in the seminar group. Information concerning the seminar may be obtained by writing to J. J. Bloomfield, Chief, Field Operations Section, Industrial Hygiene Division, U. S. Public Health Service.

MEETINGS

WAR CONFERENCE ON INDUSTRIAL HEALTH

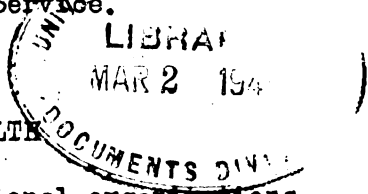
The 1944 annual meetings of the several National organizations concerned with industrial hygiene will be held at St. Louis, May 9-14, in the New Jefferson Hotel.

The National Conference of Governmental Industrial Hygienists will meet all day on May 9. The American Industrial Hygiene Association meetings will begin on May 10 and continue through the morning of May 11. The American Association of Industrial Physicians and Surgeons will start its sessions on May 11 with clinics, and meet in the afternoon with the American Industrial Hygiene Association. The American Association of Industrial Nurses will hold sessions on May 12, 13, and 14. A banquet will be held on Thursday, May 11, for all members of the 4 cooperating associations.

Scientific exhibits will be arranged in addition to commercial exhibits.

The New Jefferson Hotel can accommodate all who attend the meetings, providing reservations are made early.

Further details concerning the program will be given in the March issue of this news letter.



INDUSTRIAL DENTISTS MEETING

The American Association of Industrial Dentists will hold its first annual meeting at the Palmer House, Chicago, on February 20, 1944.

REORGANIZATION OF INDUSTRIAL HYGIENE DIVISION, U. S. PUBLIC HEALTH SERVICE

The reorganization of the Public Health Service effected by action of the 78th Congress became operative on December 30, 1943. Under the new plan of administration, the present structure of the Industrial Hygiene Division, with the exception of the Research Section, becomes a Division of the Bureau of State Services. The Research Section remains in the National Institute of Health and will be known as the Industrial Research Laboratory.

Medical Director J. G. Townsend, who heads the Division, has announced the following personnel in charge of the Sections and Units which comprise the reorganized Industrial Hygiene Division:

Dermatoses Section (formerly the Dermatoses Investigation Section) - Medical Director Louis Schwartz

Field Operations Section (formerly the States Relations Section) - Senior Sanitary Engineer J. J. Bloomfield

Medical Unit - Surgeon W. C. Dreessen

Engineering Unit - Sanitary Engineer (R) Harry E. Seifert

Statistical Unit - Principal Statistician W. M. Gafafer

Chemical Unit - Senior Chemist F. H. Goldman

LEAD HAZARDS IN SMALL ARMS MANUFACTURING PLANTS

The Safety and Security Branch, Office of the Chief of Ordnance, Army Service Forces, suggests that the divisions of industrial hygiene be advised of the existence of lead hazards in the proof testing ranges of many small arms manufacturing plants. Dr. Allen D. Brandt, Sanitary Engineer, U. S. Public Health Service, assigned to the Safety and Security Branch, describes the hazard as follows:

"Practically all small arms, particularly those manufactured for the Government, are proof tested for acceptance and many of the primers of the cartridges used for proof testing contain lead compounds as you know. Very high atmospheric lead concentrations have been reported by some workers, however, most of the concentration determinations which have come to our attention are in the order of 0.40 to 0.90 milligrams per cubic meter.

"It is our thought that most Industrial Hygiene Divisions would not suspect the presence of high concentrations of lead at these operations and since they may be encountered in most small arms manufacturing facilities including revolver, rifle, machine gun, 20 mm and 37 mm cannon, it is not unlikely that plants manufacturing these arms exist in a large number of States.

"Also, very high atmospheric concentrations of lead are usually encountered in the sifting of the sand used in the target ends of the proof testing ranges. This is usually an intermittent operation of short duration and respirators seem to be the most logical solution. On the other hand, for the firing rooms the solution seems to lie in local exhaust ventilation through flexible metal ducts similar to those used in welding operations which may be readily adjusted close to the breech of the gun while firing and moved aside when the guns are being changed. About 300 or 350 cfm of air should be exhausted from each gun site."

WAR PRODUCTION BOARD ESTABLISHES
EFFECTIVE INDUSTRIAL HEALTH AND SAFETY PROGRAM

Mr. John M. Fewkes was recently appointed Chief of the Industrial Health and Safety Section, Plant and Community Facilities Service, Office of Labor Production of the War Production Board. This Section has as its major purpose the "coordinating of efforts of war agencies and the permanently established Federal, State, and private agencies interested in health and safety, toward an effective program of eliminating health and safety hazards that are interfering with war production."

A National Advisory Committee consisting of 2 representatives of the AFL, the CIO, the U. S. Chamber of Commerce, the National Association of Manufacturers, and a representative of the National Safety Council has been set up to advise the Section on its program, policies, and activities.

The Section is investigating problems of particular industries which have been brought to its attention. Hazards and unsanitary conditions existing in plants of the chromate industry have caused a labor shortage in this industry. The Public Health Service was asked by the Industrial Health and Safety Section to conduct an investigation in the 6 plants making chromates. Bad conditions found in some plants have been improved since the survey recommendations were made, and one plant has improved its labor situation.

Another investigation initiated by the Section has been concerned with the extent to which unsanitary and unsafe conditions in the logging and saw mill camps of the logging and lumber industry have been responsible for the labor shortage in this industry. After a 3-day meeting of representatives of the industry and Federal agencies concerned, held in Washington on January 17-19, the Section was requested to contact the States in which the lumber and logging industry is located and attempt to secure their cooperation in setting up a conference of their State departments of industry and labor, their State health departments, and all other agencies involved in the problem.

The Lumber and Lumber Products Division of the WPS was asked to call a meeting of the Advisory Board of the industry at which representatives of the U. S. Department of Labor and the U. S. Public Health Service would discuss immediate steps to be taken to correct conditions in the logging camps.

A conference on the crucial problem of maintaining production in the forge and foundry industry, held in Chicago on January 24, was followed by a special meeting of the Foundry and Forge Shop Labor Advisory Committee in Washington on January 25. Representatives of the U. S. Department of Labor and the U. S. Public Health Service were participants in the latter conference. Recommendations were made for the Industrial Health and Safety Section of the WPS and the U. S. Department of Labor to cooperate to secure an immediate investigation by State departments of labor of the forge and foundry shops in their States especially those designated as critical.

Dr. J. G. Townsend, Chief, Industrial Hygiene Division, has represented the Public Health Service in these meetings.

Mr. Fewkes has informed the regional and district offices of the Office of Labor Production, War Production Board, that State and local industrial hygiene units are ready to give advisory services on problems of industrial health.

UNNECESSARY USE OF CARBON TETRACHLORIDE

A study of exposure to carbon tetrachloride recently made by the Oregon Division of Industrial Hygiene resulted in the same conclusion as was reported in an account of poisoning in a parachute factory given in the January issue of the News Letter. Needless use of this toxic substance was responsible for illness and lowered production.

In the plant studied, carbon tetrachloride was added to cutting oil, white lead in oil cutting lubricants, or used straight as a cutting tool lubricant. The lubricants were applied variously and intermittently by brush, squirt can, or continuously through the piped, circulating system, for the machining of parts requiring a high degree of finish. The carbon tetrachloride is said to undergo thermal decomposition at the point of the cutting tool and to form a metallic chloride film which is very strong and thus permits high finishes to be attained with greater depths of cut and cutting speeds than could be used otherwise.

The percentage of carbon tetrachloride in the circulating systems was said to be about 4. However, it was observed in one instance that carbon tetrachloride, practically undiluted with cutting oil, was being piped to the cutting point.

Approximately 150 employees working in or near the machining departments reported to the dispensary, headache and nausea being the predominant symptoms. Three cases of gastric hemorrhage, including 2 instances of perforated gastric ulcers, were attributed to the inhalation of carbon tetrachloride vapor.

Atmospheric samples taken at breathing level with a portable combustion-absorption apparatus showed the following ranges and averages of concentrations for the various conditions listed:

General Atmosphere	5 to 55 ppm	30 ppm av.
Machining with brush or squirt can application	20 to 220 ppm	80 ppm av.
Machining with circulating lubricant	10 to 310 ppm	125 ppm av.

The use of carbon tetrachloride was discontinued upon recommendation that this be done and that adequate local exhaust ventilation be installed. It has been reported that the discontinuance has not affected the quality or speed of production.

INDUSTRIAL NOISE MUST BE REDUCED

The importance of taking action to reduce excessive noise in industries well justifies our calling to your attention the engineering service that can be obtained by manufacturers from Jacobson and Company, 335 East 45th Street, New York City, Specialists In Acoustical Correction, Industrial and Commercial Sound Conditioning. Information concerning this service can be obtained from the company's Chief Engineer, Industrial Research, L. E. Murray. A bulletin entitled "Noise In Industry" is published at intervals by the company

COURSES

Industrial Nursing

Two courses in industrial hygiene for nurses were inaugurated in Oregon in January. Dr. Thomas F. Mancuso, Director, and Mrs. Catherine Webster, Industrial Nursing Consultant, of the Division of Industrial Hygiene, Oregon Board of Health, are conducting the courses and will be the principal lecturers. Both are being offered under the auspices of the Oregon Medical School Department of Nursing Education. One is open to any graduate nurse, and may be taken for university credit. Fifty-two nurses attended the first meeting of the class. The other course is being presented to a public health nursing group as a part of the regular curriculum.

STATE ACTIVITIES

CONNECTICUT: An investigation of the production of quartz crystals for use in radio transmission has revealed some interesting facts. In the cutting and sawing of quartz, using a diamond edge circular saw and a recirculated soluble oil-water coolant, it was found that there is a definite relationship between the concentration of atmospheric dust and silica particles in the coolant liquid. An important control measure to prevent the dissemination of silica dust into the atmosphere is to change the recirculated coolant liquid frequently enough to keep the silica particles in the coolant liquid below a determined maximum.

GEORGIA: The Industrial Hygiene Service of the Georgia Department of Public Health has established a working arrangement with the Regional Office of the Food Distribution Administration for improved industrial feeding. Industrial establishments which need and are receptive to assistance in initiation or improvement of their in-plant feeding program are found by the Industrial Hygiene Service. A form requesting the services of the industrial feeding expert of the Food Distribution Administration is filled out and submitted. The feeding expert visits the establishment, observes the feeding practices, and discusses her findings and recommendations with plant officials.

The nutritionist with the Georgia Department of Public Health works in the communities outside the industrial plants with local nutrition committees. She assists in organizing home nutrition classes. All formal reports and recommendations to industry of both of these workers are channeled through the Industrial Hygiene Service. This plan avoids conflicting opinions and duplication of effort.

ILLINOIS: The Division of Industrial Hygiene has undertaken a welding study which is to consist of weight determinations of fumes evolved from the welding arc. The electrostatic precipitator is to be employed for the collection of samples. A welder's helmet will be adapted by means of a special sampling tube to allow the collection of actual breathing zone samples.

INDIANA: The Visiting Nurse Association of Indianapolis is offering a nursing service to industry on an hourly basis. Two nurses have been trained to render this type of service.

LOUISIANA: A revision of the Sanitary Code of the Louisiana Department of Health includes a new chapter on Industrial Health. Legal authority to enforce regulations concerning industrial hygiene has become effective since the State Department of Health has approved the revised code.

Occupational diseases have been added to the list of reportable diseases. New blanks and instructions will be given all physicians in the State as soon as printed copies of the Sanitary Code are ready for distribution.

MASSACHUSETTS: The Subcommittee of Industrial Nutrition of the Massachusetts Committee on Public Safety, in cooperation with the Associated Industries of Massachusetts, has made a questionnaire survey among Massachusetts industries to determine the extent of employce feeding services.

Members of the staff of the Massachusetts Division of Occupational Hygiene gave a series of lectures in January on occupational diseases in a course on accident prevention given at Worcester Polytechnic Institute. This course, part of the Engineering, Science, and Management War Training Program, was attended by a number of plant supervisors, foremen and safety men for the Worcester area.

MICHIGAN: "The Hemospast, A New Instrument" is the title of a paper prepared by Mr. J. C. Soet, Engineer, and Dr. K. E. Markuson, Director, Michigan Bureau of Industrial Hygiene, published in Industrial Medicine, January 1944. This new instrument has been developed to overcome the difficulties encountered in promoting blood testing programs for the detection of syphilis in industry and other large groups. The Hemospast lends itself to obtaining large numbers of blood specimens with a minimum of effort and expense. Complete operation details and pictures are given in the article.

MONTANA: The Division of Industrial Hygiene has been making studies of carbon monoxide concentrations in the training planes of the three pilot training schools in the State. Of the 61 cabin planes tested, 12 showed readings above 30 ppm of CO.

OKLAHOMA: A program of mass chest X-raying is now in force among employers of labor (of 50 or more) in Oklahoma County. The work is being handled as a joint endeavor of the Divisions of Industrial Hygiene and Tuberculosis Control of the State Department of Health. The Division of Public Health Education is also cooperating in an attempt to bring to industrial people information regarding the entire resources of the department.

In cooperation with the Bureau of Sanitary Engineering, the Division of Industrial Hygiene is bringing advice and counsel in matters of rat infestation control to those business concerns which have requested aid in such problems. One of the engineers, who has been assigned to assist in industrial hygiene problems, has recently conducted several surveys of this type with an experienced worker in this field in order to be prepared to make recommendations to business establishments when called upon.

There are 123 registered industrial nurses known to be employed in industry in this State, 115 of them employed in the medical departments of 3 plants connected with the airplane industry.

OREGON: In September 1943, a Division of Tuberculosis Control was established by the Oregon Board of Health. Dr. William R. Murlin, on loan from the U. S. Public Health Service, is the director of the division. Under introductory arrangements made by the State Division of Industrial Hygiene, surveys have been completed in 2 large shipyards in Portland with the 35 mm photo-fluorographic equipment used by the new division. At present, a third shipyard in Portland is being surveyed by this movable unit.

With funds subscribed by the Oregon Tuberculosis Association, the City of Portland, and Multnomah County, similar X-ray equipment has been purchased. This is to be located permanently in a Portland clinic which will be operated by the Portland City Health Department. Included in the program of the clinic will be follow-up case finding among family contacts of the tubercular individuals found in the Portland area by the State Division of Tuberculosis Control. It is also intended to use the new unit for surveys of employees of the smaller industries in Portland.

PENNSYLVANIA: A survey of dental and nutrition programs existing in industrial plants at present is being conducted by the Pennsylvania Bureau of Industrial Hygiene through its Dental Consultant and its Staff Nutritionist.

SOUTH CAROLINA: The Division of Industrial Hygiene has compiled and published in a pamphlet, the rules and regulations of the South Carolina Board of Health governing industries.

Three textile corporations owning several plants in the State have requested the Division to prepare an outline plan for medical provisions for plants and mill villages.

UTAH: The Utah Medical Association, through its Committee on Industrial Health, and the Division of Industrial Hygiene, Utah Department of Health, sponsored a symposium on Industrial Health during the afternoon and evening of January 19 in Salt Lake City. In addition to members of the medical and public health professions, members of the Industrial Commission of Utah, industrial nurses, and representatives of compensation underwriters attended the meeting.

Subjects discussed included Workmen's Compensation, State Industrial Hygiene Service, the Industrial Clinic, Nutrition in Industry under Rationing, Preventive Medicine in Industry, Ophthalmology in Industry, Diseases of the Chest in Industry, Disabilities of Sili-cosis, and Industrial Dermatoses. Valuable contributions were made by Dr. Leroy U. Gardner, Saranac Laboratory, New York, and Dr. Samuel M. Peck, Senior Surgeon, U. S. Public Health Service.

WEST VIRGINIA: The Bureau of Industrial Hygiene, in cooperation with the Tuberculosis Unit of the State Health Department, is making a number of industrial X-ray surveys.

This has met with such success and has been so well received by the industries that tentative arrangements have already been made to obtain a Mobile X-ray Unit for industrial surveys only. Such a program would be on the basis of cooperation between the Bureau of Industrial Hygiene, Tuberculosis Unit, and State and County Tuberculosis Associations.

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

J. J. Bloomfield, Chief, Field Operations Section, accompanied by Miss Victoria M. Trasko, Assistant Statistician, visited the State and local industrial hygiene divisions in Missouri the week of January 31, to appraise the work of these divisions.

Richard T. Page, Assistant Sanitary Engineer, visited the State divisions of industrial hygiene in Alabama and Georgia, from January 26 to February 7, to appraise their services and give advice on engineering problems.

Dr. Lyman D. Heacock, Senior Dental Surgeon (R), visited Connecticut recently to consult on dental programs in a number of

industries. He presented a paper on "The National Situation of Dental Care in Industry" at the annual meeting of the New York Tuberculosis and Health Association, New York City, on February 2.

Dr. Frank E. Hoecker continues the study of radium dial painting in New York State.

Miss F. Ruth Kahl, Public Health Nursing Consultant, conferred with the TVA nursing staff during February.

Thalbert R. Thomas, Passed Assistant Sanitary Engineer (R), assisted the Indiana Division of Industrial Hygiene, in January, to help develop control measures for a severe mercury exposure in a new plant.

Samuel M. Peck, Senior Surgeon (R), Dermatoses Section, has recently visited California, Illinois, Utah, and New York. In California, he investigated dermatoses problems in airplanes and shipbuilding industries in collaboration with the California Bureau of Industrial Health; also gave lectures to groups of industrial nurses in Burbank and Oakland. In Illinois, a lecture was given at the University of Illinois, and several industries investigated at the request of the State Division of Industrial Hygiene. This State has requested that a dermatologist be assigned for a definite period of time.

Dr. Peck presented two in his series of postgraduate lectures at the Skin and Cancer Hospital, New York.

In Utah, investigation of Hill Field, Ogden, was made by Dr. Peck.

Isadore Botvinick, Passed Assistant Surgeon (R), represented the Dermatoses Section at the Connecticut State Department of Health Conference with the Hartford Chamber of Commerce on January 17. Dr. Botvinick will begin his 2-month field assignment in Connecticut on February 15.

Synthetic Rubber Study

The Dermatoses Section, Industrial Hygiene Division, is now undertaking a study of synthetic rubber. A confidential report on the patch tests with neoprene latex film for garments which will be worn in contact with the skin has been submitted to the Office of the Rubber Director of the War Production Board.

NEW MATERIALS

A "Code of Recommended Practices for Industrial Housekeeping and Sanitation" for the Foundry Industry has been developed by the Industrial Hygiene Codes Committee of the American Foundrymen's Association. Copies of this 16-page planographed publication can be secured from the American Foundrymen's Association, 222 West Adams Street, Chicago 6, Illinois, at a price of \$1.50 per copy.

PERSONNEL

The following members have joined the staff of the Michigan Bureau of Industrial Hygiene, effective January 1, 1944: Mrs. Mabelle Markee, Industrial Nursing Consultant; Frederick T. McDermott, Engineer; and Roland B. Miller, Engineer.

Assistant Sanitarian (R) Walter A. Quebedeaux has been assigned to the State Health Department of Missouri for duty in the City of St. Louis.

The increase of requests from States for cooperation and investigation of their dermatoses problems, and the loan of dermatologists to the States has necessitated the addition of another dermatologist to the Dermatoses Section. Armond L. Leibovitz, Assistant Surgeon (R), will report for duty March 12, 1944.

NEW PUBLICATIONS

(Supplement to the Publications List of the Industrial Hygiene Division, U. S. Public Health Service, February 1944.)

LABOR'S ROLE IN INDUSTRIAL HYGIENE. J. J. Bloomfield. Proceedings, Third Annual Convention of the International Council of Chemical and Allied Industries Unions, American Federation of Labor, Kansas City, Missouri, Sept. 13-16, 1943, pp. 43-53.

TOXICOLOGY OF DICHLOROMETHANE (METHYLENE CHLORIDE). I. Studies on Effects of Daily Inhalation. L. A. Heppel, P. A. Neal, T. L. Perrin, M. L. Orr, and V. T. Porterfield. J. Ind. Hyg. Toxicol., 26: 8-16 (Jan. 1944).

TOXICOLOGY OF DICHLOROMETHANE (METHYLENE CHLORIDE). II. Its Effect upon Running Activity in the Male Rat. L. A. Heppel and P. A. Neal. J. Ind. Hyg. Toxicol., 26: 17-21 (Jan. 1944).

EFFECT OF LONG ULTRAVIOLET AND SHORT VISIBLE RADIATION (3500 TO 4900 Å) ON ESCHERICHIA COLI. Alexander Hollaender. J. Bact., 46: 531-41 (Dec. 1943).

OCCUPATIONAL DISEASE. THE APPROACHES TO AN ADEQUATE STUDY. J. G. Townsend. Ind. Med., 13: 132-35 (Feb. 1944).

Reprint Available: No. 2523. An outbreak of dermatitis from hair lacquer. Louis Schwartz.

News items for publication in INDUSTRIAL HYGIENE NEWS LETTER should be submitted to: Senior Sanitary Engineer J. J. Bloomfield, Industrial Hygiene Division, U. S. Public Health Service, Bethesda 14, Maryland.
