

INDUSTRIAL HYGIENE

Current News of Official Industrial Hygiene Activities



Including this month a supplementary program
of the
National Conference of Governmental Industrial Hygienists

Vol. 2, No. 3
March 1942

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DIVISION OF INDUSTRIAL HYGIENE, NATIONAL INSTITUTE OF HEALTH,
U. S. PUBLIC HEALTH SERVICE, BETHESDA, MARYLAND

WAR ACTIVITIES

INDUSTRIAL HYGIENE PROGRAM SPEED-UP

National Reconnaissance Survey Completed

The Nationwide reconnaissance survey begun July 1941 by Dr. J. G. Townsend, Chief, Division of Industrial Hygiene, National Institute of Health, and Mr. J. J. Bloomfield, Chief of the States' Relations Section, has now been completed.

This survey, designed to appraise the strength, resources and needs of State and local industrial hygiene units, carried Dr. Townsend and Mr. Bloomfield through 38 States.

Their most recent trip, which ended the seven-month study, included visits to Ohio, Indiana, Illinois, Wisconsin, Michigan, and the City of Detroit. The rapid changeover from auto to airplane production in Detroit has raised immediate problems of maintaining proper industrial health safeguards, and arrangements are now being made with the Michigan Department of Health to furnish that city with three additional engineers and one technician.

INDUSTRIAL HYGIENISTS' CONFERENCE

Schedule for Washington Meeting Completed

The schedule of speakers for the fifth annual meeting of the National Conference of Governmental Industrial Hygienists, to be held in Washington, D. C., April 9-11, has been completed and mailed.

The conference, which will meet jointly with the Subcommittee on Industrial Health and Medicine of the Office of Defense Health and Welfare Services, will be open to anyone directly or indirectly interested in industrial health.

Preliminary Conference Notes:

The revised monthly report form D-a is now in the mail, and it is hoped that all those concerned with the new form will raise whatever questions they may have at the Conference.

Industrial nursing programs will be discussed at the Conference in a paper to be presented by Miss Olive Whitlock, Public Health Nursing Consultant attached to the States' Relations Section of the Division of Industrial Hygiene of the National Institute of Health. Mr. J. J.

WAR ACTIVITIES

Bloomfield, Secretary-Treasurer of the Conference, has asked the State Industrial Hygiene Division directors to be prepared to participate in a discussion of the subject following Miss Whitlock's presentation.

Reminder: Have you made your hotel reservations for the Conference?

ORDNANCE SURVEYS CONTINUED

Detailed medical and engineering studies of Ordnance plants in three States were made in March; one is already completed and two are still in progress.

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DIVISION ACTIVITIES

STATES' RELATIONS SECTION

Nursing Services in Industry

The program to study the duties of nurses in industry, begun in April 1941 by the Nursing Section of the American Public Health Association, now includes a newly-developed survey form which is being distributed by the eight District offices of the Public Health Service.

There will be two meetings of the Committee to Study the Duties of Nurses in Industry, one in Philadelphia on April 17, before the annual meeting of the Industrial Nursing Conference, and the other at Chicago in May, at the time of the biennial conference of national nursing organizations.

Personnel on Loan to States

Physicians and chemists assigned from the Division of Industrial Hygiene, National Institute of Health, to work with State industrial hygiene divisions are: Lucian E. Renes, Assistant Sanitary Engineer (R), to Illinois; Dr. Christopher Leggo, Surgeon (R), and Richard W. Schayer, Assistant Chemist, to Missouri; and Dr. Lloyd M. Farner, Passed Assistant Surgeon (R) to Tennessee.

D I V I S I O N A C T I V I T I E S

DERMATOSES INVESTIGATIONS SECTION

Cutting Oil Dermatitis Investigated

An investigation was made by the Dermatoses Investigations Section, Division of Industrial Hygiene, National Institute of Health, of an unusual outbreak of dermatitis from cutting oils at the Wright Aeronautical Corporation in Paterson, New Jersey. A number of the workers were found to have an eruption of the face resembling chloracne from Halowax. Upon examination of the oils by Assistant Chemist Howard S. Mason, it was found that two of the oils, manufactured by the same company, contained chlorine compounds. Distillation experiments showed that continued heating of these oils under machine shop conditions would produce tarry chlorine compounds.

A letter to the makers confirmed the fact that these oils contained considerable quantities of chlorine, having been treated with sulfur chloride. From these facts it is likely that the peculiar nature of the cutting oil dermatitis found in this plant is due to the presence in the cutting oil of chlorinated fatty and tarry substances. This is the first reported and confirmed instance where cutting oils have caused not only an ordinary form of cutting oil dermatitis, but chloracne as well. A report of this investigation will soon be made in the form of a publication.

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S T A T E A C T I V I T I E S

MICHIGAN

The Michigan Industrial Hygiene Society will present a conference on industrial health conservation on March 27, 1942, at the Hotel Statler in Detroit, Michigan.

KENTUCKY

Miss Miriam Christoph, U. S. Public Health Service nurse formerly attached to Bourbon County, has been assigned as Industrial Hygiene Consulting Nurse, attached to the Bureau of Industrial Hygiene.

STATE ACTIVITIES

VERMONT

Small Plant Saves Production Time

From Dr. Robert B. Aiken, Medical Director of Industrial Hygiene, comes word of a small Vermont plant which is helping further the Nation's all-out production effort by beginning medical services within the plant.

One paragraph in the company's report is particularly interesting:

" . . . worthy of mention is the fact that by having the physician in attendance at the plant we were able to save considerable lost time that would have been incurred by the various medical cases having to go to the doctor's office to have treatments. During the month of December there were 87-1/2 hours lost by the men having to go uptown for treatments. During the month of January there were only 7 hours lost for the same reason. This represents a saving of 80-1/2 hours in machine and labor time."

INDIANA

Atmospheric Dust Sampling Apparatus

From Mr. J. W. Kirkpatrick, Industrial Hygiene Engineer of the Bureau of Industrial Hygiene, Indiana State Board of Health, comes a description of equipment used by the Bureau for the collection of relatively large samples of atmospheric dust for chemical and petrographic analysis.

The apparatus is suspended at the workmen's breathing level in the vicinity in which dust counts are also being made. A two stage centrifugal compressor driven by a one-half horse power universal motor draws air through a dense, cone-shaped, cellulose fibre filter located at the bottom of the machine. The filtered air is discharged at the top through a hose and is carried to a point such as will cause no unusual air currents in the vicinity.

The sampling rate with a clean filter is approximately forty-five cubic feet of air per minute and with a very dirty filter, a rate in excess of thirty cubic feet per minute is maintained. Each filter is used but once. The filter area is approximately 157 square inches. The dust is deposited in a smooth layer on the outside surface of the cone from which it may be easily removed with a spatula. In very dusty atmospheres, several grams of material may be collected in an hour or two. The filter efficiency is very near 100% and it has been found that all

STATE ACTIVITIES

particles of significant size are retained, even immediately after the sampling has begun.

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GENERAL

INDUSTRIAL PHYSICIANS MEET WITH AMERICAN INDUSTRIAL HYGIENE ASSOCIATION

The 27th annual meeting of the American Association of Industrial Physicians and Surgeons and the third annual meeting of the American Industrial Hygiene Association will be held at Cincinnati April 13-17, 1942.

The Conference subjects will range from emphasizing the medical aspects of industrial health on the first day's meeting, to engineering discussions during the final sessions.

SAN FRANCISCO MEDICAL COMMITTEE ON INDUSTRIAL HEALTH

The San Francisco County Medical Society has appointed a committee on industrial health which is prepared to study the industrial hygiene problems of plants in San Francisco without charge. They will cooperate with plant officials in planning methods of reducing health and accident hazards, arranging for detailed engineering and medical studies where necessary, and helping to establish medical departments at the request of the establishments.

FEDERAL WORKERS HEALTH SERVICE PROPOSED

Plans are being considered to establish an industrial health service for Federal workers to reduce sick leave, which costs government agencies \$100,000,000 a year. It is to be coordinated under the United States Public Health Service, through the Division of Industrial Hygiene, and tentative plans are that medical directors for each Department will be selected from the U. S. Public Health Service staff, who will be administratively responsible to the Department head.

-5-

GENERAL

Emphasis will be on prevention and discovery of disease, through health education programs, sick absenteeism studies, removal of health hazards, and first aid and treatment for minor ailments. Treatment and cure for more serious conditions will be left to the private physician.

CORRECTION

Sodium Nitrate and Sodium Nitrite

In the review of the article on "Toxicology of Acrylonitrile (Vinyl Cyanide)" in last month's NEWS LETTER, it was stated that sodium nitrate has protective and antidotal action against acrylonitrile poisoning. The statement should have read, "It is indicated that injection of sodium nitrite has protective and antidotal action at a dosage of 50 mg. NaNO_2 per kg."

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NEW PUBLICATIONS

Effect of Exposure to Known Concentrations of Carbon Monoxide: a Study of Traffic Officers Stationed at the Holland Tunnel for Thirteen Years. R. F. Sievers, T. I. Edwards, A. L. Murray, and H. H. Schrenk. J. Am. Med. Assoc. 118, 585-588 (Feb. 21, 1942).

Examination of a group of one hundred and fifty-six Holland Tunnel traffic officers exposed throughout a period of thirteen years to an occupational carbon monoxide exposure averaging 0.7 part of CO per 10,000 parts of air did not reveal any evidence of injury to health attributable to CO exposure.

Public Health Service engineers have made a large-scale industrial hygiene survey of arsenals and other industrial establishments engaged in national defense production, both light and heavy industry, testing for CO wherever its presence was suspected. Except for places where internal combustion engines were being operated, the concentrations of CO were well within the limits that prevail at the Holland Tunnel.

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NEW PUBLICATIONS

Preventive Measures against Oil Dermatitis. H. G. Dyktor, Michigan Department of Health, Bureau of Industrial Hygiene, Lansing, Michigan (1941). 8 pp. (Multilithed).

A booklet for the use of non-medical personnel responsible for working conditions in industry. It gives instructions for washing facilities and routines, recommends the use of a germicidal agent, such as phenol, in the oil, use of non-irritating, easily removable ointments, issuing clean wiping rags at the beginning of each shift, and supplying separate lockers for employees' work and street clothes.

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General Requirements Concerning Plant Sanitation Facilities. Sanitation Bulletin No. 1, Michigan Department of Labor and Industry, and Michigan Department of Health, Lansing, Michigan (Jan. 15, 1942).

Outlines in detail instructions covering drinking water, toilet facilities, washing facilities, dressing rooms, eating rooms, water supply and sewage disposal.

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Emergency Plant Protection Organization. Headquarters Medical Department, Westinghouse Electric & Manufacturing Co., East Pittsburgh, Penn. 19 pp. (Mimeographed).

Description of personnel organization, and details of equipment needed for complete plant protection during air raids and other war emergencies.

Covers organization of medical, fire, and police departments, engineering service, (rescue and demolition squads, communications and control squad, emergency repair, salvage, camouflage and blackout, and unexploded bomb squads) plant wardens and observers department. Included are directions for establishing a protected, easily accessible plant control center from which activities may be directed during emergency periods.

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News items for publication in INDUSTRIAL HYGIENE should be submitted to Sanitary Engineer, J. J. Bloomfield, Division of Industrial Hygiene National Institute of Health, Bethesda, Maryland.

JOINT MEETING

of the

NATIONAL CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

and the

SUBCOMMITTEE ON INDUSTRIAL HEALTH AND MEDICINE
of the Health and Medical Committee, Office
of Defense Health and Welfare Services

April 9, 10, and 11, 1942

Social Security Building Auditorium
4th and Independence Avenue, S. W.
Washington, D. C.

THURSDAY, APRIL 9, 9:00 a.m.

- 9:00 a.m.: Registration. Lobby of the Auditorium.
- 9:30 a.m.: Opening session. Dr. C. A. Mau, Chairman of the National Conference of Governmental Industrial Hygienists, presiding.
1. Remarks by Surgeon General Thomas Parran, U. S. Public Health Service.
 2. Greetings to the Conference. Paul V. McNutt, Administrator, Federal Security Agency.
 3. Manpower and Training. Channing R. Dooley, Chief, Training in Industry Section, Labor Division, War Production Board.
 4. The Work of the Subcommittee on Industrial Health and Medicine. Clarence D. Selby, M. D., Chairman.
 5. Activities of the Committee for the Conservation of Manpower in War Industries. Verne A. Zimmer, Director, Division of Labor Standards, U. S. Department of Labor.

Discussion: Michael M. Davis, Chairman of the Committee on Research in Medical Economics.
 6. Wartime Tasks of the States' Relations Division. Assistant Surgeon General Joseph W. Mountin, U. S. Public Health Service.

THURSDAY, APRIL 9, 12:30 p.m.

Executive Session: Dr. C. A. Nau, presiding.

1. Roll call.
2. Committee appointments.
3. Report of Executive Committee.
4. Report of Secretary-Treasurer.

THURSDAY, APRIL 9, 2:00 p.m.

1. The Cost of Absenteeism and Suggestions for Lessening the Loss. Andrew Fletcher, Vice-President and Treasurer, St. Joseph Lead Company.
2. Labor and the Industrial Health Problem. Ralph D. Hetzel, Jr., Director, Economic Division, Congress of Industrial Organizations.
3. Coordination of Industrial Health Effort. Orlen J. Johnson, M. D., Council on Industrial Health, American Medical Association.
4. The Relationship of the Hygienist to Medicine in Public Service. Raymond Eussey, M. D., Medical Board for Occupational Diseases, Maryland State Industrial Accident Commission.

FRIDAY, APRIL 10, 9:30 a.m.

Dr. Clarence D. Solby, presiding.

1. Wartime Field Activities of the Division of Industrial Hygiene. Sanitary Engineer J. J. Bloomfield, U. S. Public Health Service.
2. California's Industrial Hygiene Program in War Industries. H. T. Castberg, M. D., Acting Chief, Industrial Hygiene Service, California Department of Public Health.
3. The Industrial Hygiene Program of the Connecticut State Medical Society. Clifford Kuh, M. D., Chairman, Committee on Industrial Health.
4. Recent Industrial Hygiene Activities in Ontario, Canada. J. G. Cunningham, M. D., Director, Division of Industrial Hygiene, Ontario Department of Health.
5. Tuberculosis Control in Defense Industries. Passed Assistant Surgeon H. E. Killeboe, U. S. Public Health Service.

FRIDAY, APRIL 10, 2:00 p.m.

1. Wartime Research in the Division of Industrial Hygiene. Surgeon Paul A. Neal, U. S. Public Health Service.
2. Dermatoses in the War Industries. Medical Director Louis Schwartz and Passed Assistant Surgeon John E. Dunn, U. S. Public Health Service.
3. Industrial Nursing in the United States. Olive M. Whitlock, Public Health Nursing Consultant, U. S. Public Health Service.
4. Health Information for War Workers. Elizabeth G. Pritchard, Division of Sanitary Reports and Statistics, U. S. Public Health Service.
5. Summary of the Conference and Future Objectives. Medical Director James G. Townsend, Chief, Division of Industrial Hygiene, National Institute of Health.

FRIDAY, APRIL 10, 4:30 p.m.

Executive Session

FRIDAY, APRIL 10, 6:30 p.m.

Banquet

Cosmos Club
Madison Place and H Street, N. W.
Washington, D. C.

SATURDAY, APRIL 11, 9:30 a.m.

Informal visit of delegates to the laboratories of the Division of Industrial Hygiene, National Institute of Health, Bethesda, Maryland.

SATURDAY, APRIL 11, 10:00 a.m.

Round table will be held for the public health nursing consultants of State divisions of industrial hygiene. Other members attending the Conference are invited. (Room 1C7, Division of Industrial Hygiene, Building No. 2, National Institute of Health, Bethesda, Maryland.)