INDUSTRIAL HYGIENE NEWS LETTER

Current News of Official Industrial Hygiene Activities

Issued monthly by the Federal Security Agency
Industrial Hygiene Division, U. S. Public Health Service
Bethesda 14, Maryland

Vol. 6

April-May 1946

Nos. 4 & 5

IN THIS ISSUE
Page
Certain Surplus War Materials Hazardous for Civilian Use 1
Mercury Vapor Hazard Reduced
Puerto Rican Industries Need Industrial Hygiene Program-
Blocmfield
Survey of Cemented Carbide Industries Progressing 3
West Virginia Air Pollution Study in Progress 4
Colorado Investigation Reveals Unsuspected Danger 4
Syracuse, New York, Unit Summarizes Services
Staff of State Editors Appointed 6
"Doctor in Industry" Shown in Washington, D. C 6
Industrial Hygiene Exhibit Available for Labor Meetings 7
Theodore Hatch Awarded Legion of Merit
Thanks for Your Suggestions
Explaining the April-May Issue
Activities Among the States 8
Lecture and Discussion News
Publications of Interest
Personnel News and Notes

CERTAIN SURPLUS WAR MATERIALS HAZARDOUS FOR CIVILIAN USE

Advice of the U. S. Public Health Service has recently been requested by the War Assets Corporation in connection with the sale of certain surplus war materials to be released for civilian use. An impregnated fabric, treated with chemicals to prevent burns from mustard gas, was manufactured during the war to protect the military forces who might be exposed. It is well known that the chemical used to impregnate the fabric causes skin irritation which makes it undesirable for civilian use. Recommendations were made for de-contaminating this fabric. If these recommendations are followe it will be possible to release twenty-eight million dollars worth of clothing to civilian markets without risk of dermatitis.

A large lot of clothing lined with fiber glass had to be recalled from certain markets when it was found to have caused a severe dermatitis because it was used as lining for coats and suits. The material was originally made to use in bombers since the glass fabric is fireproof. The Industrial Hygiene Division recommended that fiber glass should not be used in wearing apparel.

A small number of radium markers which were made and used by the War epartment were released for civilian sale until they were called in at the astigation of the Division of Occupational Hygiene, Massachusetts Department of Labor and Industries. Although the markers were labeled "Poison," persons were reported removing the radium, thus exposing themselves to radium poisoning.

MERCURY VAPOR HAZARD REDUCED

An investigation of the potential mercury vapor hazard in a research laboratory was made by Passed Assistant Engineer (R) Lucian E. Renes of the Industrial Hygiene Division, U. S. Public Health Service, and Mr. William Stalker of the Division of Industrial Health, Kentucky Department of Health.

The gas research laboratories used metallic mercury in manometers, pressure flow regulators, leveling tubes, and as a seal in reaction vessels, extraction apparatus, and mercoid switches. As a result of accidents during manipulation of the apparatus, some mercury was spilled on the benches and floors. Experience from numerous investigations in other laboratories has shown that mercury particles will lodge in the pores, cracks, and crevices of untreated wood or concrete surfaces unless prompt and adequate measures are used to clean up spilled mercury. Such surface areas contaminated with inute particles of mercury present a large surface area from which continual explution of mercury vapor occurs.

The relatively small degree of room contamination found in the laboration is after several years of operation compared favorably with the results in mimerous other laboratories. This may be credited to housekeeping and adequate natural and mechanical ventilation. However, it was recommended that bench tops and floors should be thoroughly scrubbed with soap and water, and rinsed off with copious amounts of water. After cleaning, cracks and crevices in the benches should be sealed with caulking compound, and several coats of wax should be applied. Floors should be given one or more coats of paint to seal over the rough and porous concrete surface to provide an impervious surface.

Other recommendations included the installation of deep trays of material impervious to mercury under the chembal apparatus to minimize dispersion of accidentally spilled mercury.



NEW PUBLICATIONS

(Supplement to Publications List of the Industrial Hygiene Division, U. S. Public Health Service, and the Industrial Hygiene Research Laboratory, National Institute of Health, January to March, 1946.)

INDUSTRIAL DENTISTRY AS A CAREER. Lyman D. Heacock. Jour. Amer. Dental Assn., 33: 57-58 (January 1, 1946). Reprints Available.*

TEALINORK FOR INDUSTRIAL HEALTH. J. J. Bloomfield. Amer. Jour. Pub. Health, 36: 261-268 (March 1946). Reprints Available.*

TOXICOLOGY OF 1,2-DICHLOROPROPANE (PROPYLENE GLYCOL). I. STUDIES ON EFFECTS OF DAILY INHALATIONS. L. A. Heppel, Paul A. Neal, B. Highman, and V. T. Porterfield. Jour. Indust. Hyg. & Toxicol., 28: 1-8 (January 1946). Reprints Available.***

PREVENTION OF ORAL DISEASES OF OCCUPATIONAL ORIGIN. Lyman D. Heacock. Indust. Med., 15: 184-187 (March 1946). Reprints Not Available.

A MEDICAL STUDY OF THE EFFECT OF TNT ON WORKERS ON A BOMB AND SHELL LOADING PLANT. R. F. Sievers, Alfred H. Lawton, Folke Skoog, Paul A. Neal, and W. F. von Oettingen. REPORT OF FATAL CASE OF APLASTIC ANEMIA. Robert L. Stump, A. Ralph Monaco, and R. F. Sievers. Pub. Health Bull. No. 291, Govt. Print. Office, Washington (1945).**

THE EXCRETION OF DDT (2,2-BIS-(P-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE) IN MAN, TOGETHER WITH CLINICAL OBSERVATIONS. Paul A. Neal, T. R. Sweeney, S. S. Spicer, and W. F. von Oettingen. Pub. Health Repts., 61: 403-409 (March 22, 1946). Reprints Available.**

SOME PHYSICAL PROPERTIES OF DDT AND CERTAIN DERIVATIVES. Howard L. Andrews, William C. White, L. R. Gamow, and Dorothy C. Peterson. Pub. Health Repts., 61: 450-456 (March 29, 1946). Reprints Available.**

RELATION OF ULTRAVIOLET INDUCED MUTATIONS TO SPECIATION IN DERMATOPHYTES. C. E. Emmons and A. J. Hollaender. Jour. of Dermatology, 52: 257-261 (October 1945). Reprints Not Available.

A POSSIBLE COMMON MITOCHONDRIAL ORIGIN OF THE VARIEGATIONAL AND VIRUS DISEASES IN PLANTS AND CANCERS IN ANIMALS. H. G. DuBuy and M. W. Woods. A.A.A.S. Symposium of Cancer Monograph (December 1945). Reprints Not Available.

THE TOXICITY AND POTENTIAL DANGERS OF DDT TO HUMANS AND WARM-BLOODED ANIMALS. P. A. Neal and W. F. von Oettingen. Medical Annals of the District of Columbia, 15: 15-19 (January 1946). Reprints Available.***

^{*}Request should be addressed to Medical Director J. G. Townsend, Chief, Industrial Hygiene Division, U. S. Public Health Service, Bethesda 14, **Request should be addressed to Publications Section, U. S. Public Health Service. Bethesda 14. Md.

^{***}Request should be addressed to Medical Director P. A. Neal, Chief, Industrial Hygiene Research Laboratory, National Institute of Health, Bethesda 14.

PREVENTIVE METHODS FOR THE PREVENTION OF INDUSTRIAL DERMATOSES. Louis Schwartz. Indust. Med., 15: 174-176 (February 1946). Reprints Available.*

THE DETERMINATION OF CATECHOL, PHENOL, AND HYDROQUINONE IN URINE. H. D. Baernstein. Jour. of Biol. Chem., 161: 685-692 (December 1945). Reprints Available.***

OCCUPATIONAL DERMATOSES. Louis Schwartz. Jour. Missouri State Med. Soc., 42: 771-776 (December 1945). Reprints Available.*

DERMATITIS AMONG THE USERS OF COSMETICS. Louis Schwartz. Amer. Perfumer & Essential Oil Rev., 48: 45-46 (January 1946). Reprints Not Available.

A METHOD FOR THE DETERMINATION OF IRON IN WELDING FUME SAMPLES. Robert G. Keenan and Bettie L. Minderman. Jour. Indust. Hyg. & Toxicol., 28: 32-36 (March 1946). Reprints Available.***

FUERTO RICAN INDUSTRIES NEED INDUSTRIAL HYGIENE PROGRAM—BLOOMFIELD

Approximately 50 per cent of the half million workers in Puerto Rico will benefit from an industrial hygiene program if the recommendations of Mr. J. J. Bloomfield, U. S. Public Health Service, are carried out. At the invitation of Dr. A. Fernos-Isern, Mr. Bloomfield spent more than two weeks conferring with government officials and industrialists in Puerto Rico, determining the extent of the need for an industrial hygiene program and the scope of proposed plans.

Mr. Bloomfield interviewed staff members of the Department of Health who would be called on to collaborate in the work of the industrial hygiene program. He also conferred with representatives of the State insurance organization that carries on factory inspection, as well as members of the Puerto Rico Development Company, the School of Tropical Medicine, College of Agriculture and Mechanical Arts, University of Puerto Rico, Puerto Rico Medical Association, and others.

After these preliminary meetings, Mr. Bloomfield visited 20 plants that represented typical insular industries, such as cement, glass, paper, clothing, and sugar. Reports of each plant summarized, among other pertinent data, the presence or absence of first-aid, medical or mursing service, housekeeping and sanitation facilities, safety measures, fire protection, exposure hazards, and exhaust ventilation.

Puerto Rican industrial conditions are far behind those in the modern American plant. To assist the Insular Health Department in the solution of many problems, Mr. Bloomfield is recommending the establishment of a Bureau of Industrial Hygiene, staffed by a physician, engineer, chemist, murse, and health educator.

+ + + + +

SURVEY OF CEMENTED CARBIDE INDUSTRIES PROGRESSING

The field work involved in a detailed study of two Pennsylvania plants selected for a survey of health hazards in the comented carbide industry has been completed. The nationwide survey, which has been in active progress for several months, is being conducted by the U.S. Public Health Service.

The physical and dental examination of each employee was a complete one. Environmental conditions were studied by the engineers in all stages of operation. In order to evaluate the working conditions, the samples of dust and fume were collected and are now in the process of physical and chemical examination by chemists in the Industrial Hygiene Division laboratory.

Preparations have been made to continue the survey in a large plant in Michigan, the third and one of the largest plants to be studied. The examining staff is composed of physicians, dentists, nurses, and engineers, with the aid of technicians and such clerical help as is necessary.

The principal substances to which workmen are exposed in these plants are cobalt, cobalt oxide, tungsten, tungsten carbide, and, to some extent, titanium carbide and tantalum carbide. About 3,000 persons working in the cemented carbide industries will benefit from this extensive survey when final recommendations are made and adopted.

* * * * *

WEST VIRGINIA AIR POLLUTION STUDY IN PROGRESS

The Bureau of Industrial Hygiene, West Virginia State Department of Health, has been conducting an air pollution study in the Charleston area of West Virginia that will probably extend through the calendar year. A number of industrial plants contribute to the soot in the City of Charleston, and it is hoped that the particle size distribution data, as well as any differences in the composition of the dust, will yield information about the sources of pollution.

Soot fall is being measured at 12 different stations along the Kanawha River, taking in a strip of territory 25 miles long. This includes one control station 6 miles northeast of Charleston. The soot is being measured for total solid and ash content as well as particle size distribution. Soot samples are also being subjected to chemical and X-ray investigation at the laboratories of the Industrial Hygiene Division at Bethesda.

In addition to these analyses of the soot, mild steel plates have been set out to measure corrosion. There are 11 such stations in the Charleston area, and 8 stations in other West Virginia cities.

When the entire study is completed recommendations will be made in an effort to reduce the smoke pollution problem in this area.

* * * * *

COLORADO INVESTIGATION REVEALS UNSUSPECTED DANGER

During a study made by the Colorado Division of Industrial Hygiene, it was found that the characteristic odor of natural gas treated with calodorant can be masked by passing the gas through moist sand or gravel. This conclusion was a later development of a routine investigation reported in the March issue of the INDUSTRIAL HYGIENE NEWS LETTER.

At the request of the Director of the county health unit, the State Division of Industrial Hygiene investigated the cause of headaches and nausea occurring among bank employees working in a basement vault. The vault was constructed of concrete and was completely enclosed with the exception of a steel door. A six-inch cast iron water pipe from the stree to outside passed through the vault.

Inspections were made, and only a slight odor of a gas or air contaminant was discernible. Tests for carbon monoxide and hydrogen sulfide were negative, but when tests were made with the combustible gas indicator

the readings were recorded as high as 4.0 - 4.5 per cent (approaching explosive limit). It was found that very high concentrations of gas, 10.0 per cent, were seeping into the vault around the periphery of the water pipe, where it entered the vault, even though there appeared to be a fairly close bond between the pipe in the concrete wall.

Recommendations were made to the City and Public Utilities officials to sink test holes in the street pavement along the course of the water main. When samples were taken in the test holes, the combustible gas indicator immediately went off scale. Excavations were made at once to purge the ground of gas and to check the gas mains in the vicinity. A leaking pipe joint was found adjacent to the water main which was approximately 50 feet from the building, and it is believed that the water pipe which led to the bank provided an avenue for the seeping gas to follow.

As soon as the excavations were made, the gas problem in the vault was eliminated. Public Utilities officials had on several occasions investigated the vault prior to the time when the Division of Industrial Hygiene made these tests, and stated that the air contaminant was not natural gas as there was no evidence of the characteristic odor of calcdorant which is added to natural gas (natural gas in this instance is 80.0 per cent methane) as a safety measure to detect small concentrations by its typical pungent odor.

It was reported at that time that the odor of calodorant could not be masked. Later evidence was found to show that it could be practically entirely masked or removed in gas so treated by passing it through a considerable quantity of damp sand which was the condition of the subsoil in this instance. Necessary repairs were made to correct this hazard.

* * * * *

SYRACUSE, NEW YORK, UNIT SUMMARIZES SERVICES

About three years ago, in Syracuse, New York, a branch unit of the Division of Industrial Hygiene and Safety Standards of the New York State Department of Labor was established to serve the 454 industrial plants in that area.

In the annual report to the U. S. Public Health Service for the calendar year 1945, the accomplishments of the unit, aimed at protecting the health of industrial workers, are reflected in the summary. Forty-six per cent of the 454 plants in that area were serviced by the Industrial Hygiene Unit. This required 536 man-visits by which the staff was enabled to give service to 133,150 workers.

Among the many activities of this group of five persons were the "plan examinations," which refers to the examination and advice given in connection with blue-prints of plans for ventilation equipment to be installed in industrial establishments. Several hundred consultations were held with plant engineers, ventilation engineers, and ventilation contractors before plans were submitted in final draft.

Over 500 recommendations were made to industrial plants for the improvement of the environmental health and welfare of 99,452 workers. Compliance with the recommendations was obtained in 30 per cent of the plants.

Such a report as this indicates the amount of service that can be given an industrial community and demonstrates the need for intensification of such a program in many localities.

STAFF OF STATE EDITORS APPOINTED

In a memorandum to State directors of industrial hygiene divisions, Dr. James G. Townsend asked every unit to name a State editor to report the activities for the INDUSTRIAL HYGIENE NEWS LETTER.

Although the staff of State editors is not complete at the present time, the following persons have been named to the responsibility of gathering and reporting the news of their respective States:

ALABAMA, A. T. Rossano, Jr.; ARKANSAS, W. A. McQuary; COLORADO, Wiss Vera Knickerbocker; GEORGIA, N. V. Hendricks; ILLINOIS, Kenneth Morse; INDIANA, L. W. Spolyar; KANSAS, R. M. Heilman; MASSACHUSETTS, Miss Bernice Linde; MINNESOTA, Miss Heide Henriksen; OREGON, C. M. McGill; PENNSYLVANIA, Philip C. Hill; TENNESSEE, Marion F. Trice; UTAH, Mrs. Eleanor Christensen; WEST VIRGINIA, H. G. Bourne, Jr.; WISCONSIN, Miss Catherine Chambers.

"DOCTOR IN INDUSTRY" SHOWN IN WASHINGTON, D. C.

General Motors, Inc., has made a movie called "Doctor in Industry" which made its Washington, D. C., premiere recently before a large group of medical, nursing, and industrial hygiene personnel. The movie, made for popular distribution, portrays the life of a young doctor beginning his practice about 30 years ago. His interest in industrial medicine grew and developed with the years as he encouraged industrial health programs and plant medical departments, including health examinations, periodic check-ups, rehabilitation, and placement service. He pioneered in the field of environmental hazards and controls with the customary distrust of his colleagues. However, success and acclamation concluded the story of this doctor in industry.

When the film is approved by the professional groups concerned and released for distribution, any group or organization is privileged to borrow it for a local showing.

INDUSTRIAL HYGIENE EXHIBIT AVAILABLE FOR LABOR MEETINGS

An exhibit which sets forth the services of industrial hygiene has been prepared for showing at labor meetings and other gatherings of persons interested in industrial hygiene. The exhibit consists of three panels about six feet high, especially constructed for ease of setting up and taking down, as well as packing for shipment. Lighting equipment also is a part of the exhibit.

The left panel, titled "Industrial Hygiene Protects You on the Job," is a large photo-cutout of a man at work, wearing protective clothing and using necessary protective devices. The middle panel pictures the services of a plant that guards the health of its workers and safeguards their working conditions. On the right panel a complete industrial hygiene plant service is depicted, including sanitary protection, venereal disease testing and treatment, chest X-ray for tuberculosis, home nursing, mental health, dental and welfare services.

Requests for the use of this exhibit should be placed with the Industrial Hygiene Division, U. S. Public Health Service, Bethesda 14, Maryland.

The exhibit was shown for the first time at the United Auto Workers, CIO, convention in Atlantic City in March, and is scheduled for Textile Workers Union of America, CIO, which meets in the same City in April. From May 6 to May 10, the exhibit will be on display at the annual convention of the Pennsylvania Federation of Labor.

THEODORE HATCH AWARDED LEGION OF MERIT

Theodore F. Hatch, Head of Membership Relations for Industrial Hygiene Foundation, has been awarded the Army's Legion of Merit. The presentation was made at Mellon Institute, the Foundation's headquarters. The official Army release stated:

"The Colonel was cited for his expert analysis of existing and anticipated problems which resulted in more efficient combat operations of armored vehicles and incalculable savings in lives and material. Col. Hatch was a member of the Sanitary Corps as Research Executive, Armored Research Laboratory, Fort Knox, Kentucky. He ably applied his wide experience in the field of ventilation engineering research."

THANKS FOR YOUR SUGGESTIONS!

On the last page of the February issue of the INDUSTRIAL HYGIENE NEWS LETTER you were requested to list your remarks and suggestions for forth-coming NEWS LETTERS, tear off the page, and mail it to the Editor.

Some excellent constructive ideas have been submitted. Two-thirds of the people who replied want an editorial column. A large majority of readers want to see the activities of the State industrial hygiene units reported more fully. One reader suggests a "rotating" contribution article from each unit in turn. Resumes of outstanding and interesting case histories, both medical and engineering, which involve occupational diseases would be helpful if the analysis of the solution were given.

A more complete report was requested on the performance and results of industrial hygiene programs in both large and small industries. Specific examples showing what industries are doing to improve the health and working conditions in their plants was another suggestion.

Several persons asked for more data on toxic conditions, on solvents and degreasers, and on compensation cases. Along this same line of thought, others hoped to see a question-and-answer column printed that would solve short queries on administration, field sampling, analysis and similar problems.

Publicity of educational opportunities to doctors, dentists, engineers, chemists, and nurses should be given more space in the NEWS LETTER, according to a number of readers. Current research activities also are of vital interest to all industrial hygienists.

These suggestions are appreciated and will go far to guide and influence NEWS LETTER editors in the selection of subject matter for future issues.

EXPLAINING THE APRIL-MAY ISSUE

Probably you have noticed that this issue of the INDUSTRIAL HYGIENE NEWS LETTER is called the April—May number. You are not missing a copy. We have long regretted that your NEWS LETTER reached you so late in the calendar month for which it was issued. Since the next number will be printed, we are taking advantage of the change to conform to general magazine practice. The next issue of the INDUSTRIAL HYGIENE NEWS LETTER will be the June issue. We hope to have it in the mail by May 25.

ACTIVITIES AMONG THE STATES

* * * * *

ARK ANS AS

Mr. Pleas Secoy of the U. S. Department of Agriculture has accompanied Mr. Roland E. Byrd, Industrial Hygiene Engineer, on visits to all manufacturing establishments in Arkansas large enough to maintain an in-plant feeding program.

CALIFORNIA

In a plant where recommendations on arc welding exposures were made recently, a follow-up investigation revealed that the plant management had installed new ventilation equipment which is doing an excellent job. This was an installation in which the welder has a fixed location, and the parts to be welded are placed in the same location each time. However, the tanks which are welded are of varying sizes so a certain amount of flexibility is necessary. This has been taken care of by making the hood movable.

* * *

Food fumigation was the object of an investigation in a plant engaged in the manufacture of dog food. Certain grains which are taken to the plant must be fumigated with methyl bromide. A fumigating chamber constructed of fiberboard is situated in the center of the plant. The chamber proved to be fairly gas-tight. The main danger to the employees from exposure to methyl bromide came from charging the chamber and the later aeration. The charging equipment was in poor repair and caused an exposure well above the safe limit while the chamber was being charged.

This condition is common in many packing plants where methyl bromide is used. Usually good maintenance will take care of this problem. Apparently, the sealing compound used in the various fittings is attacked by the methyl bromide and leaks develop readily. Controlled exhaust ventilation was recommended for making the air inside the chamber safe for human occupancy during the removal of the fumigated food.

* * *

Exposures to solvents used for cleaning lenses were found in a lens manufacturing plant. The main hazardous exposure was to methyl alcohol. Each worker had an open dish containing this solvent on the bench before him into which the lenses were dipped. Concentrations were found to be many times the safe limit. Recommendations called for the installation of local exhaust ventilation for each worker. The most effective means is to construct grill-topped tables with suction, over which the work is done. By this means, the vapors would be removed before they reached the breathing level of the workers.

* * *

A man operating a spectrograph in a laboratory developed severe conjunctivitis. In the usual fashion the sample was burned in a small cup, made of a carbon electrode, by passing electric current through it, thus producing ultra-violet rays harmful to the operator. Recommendations included installation of a shield on the spectrograph plus the use of protive goggles at any time the instrument is in operation.

The development of a part-time industrial nursing service for small plants has received impetus by the addition of assistance to the Red Cross Visiting Nurse Service in a northern California city. In-service training was given for this purpose to a nursing consultant of the State Bureau of Public Health. This is a much needed program in this area.

* * * * *

COLORADO

After an employee collapsed from exposure to trichloroethylene vapors, an industrial plant requested the Division of Industrial Hygiene to inspect and make recommendations for control of the high vapor concentrations. Degreasing operations were carried on in the plant.

* * *

An investigation of waste from electroplating operations was concluded with recommendations to dispose of the industrial waste water by subsoil drainage. At the time of the primary investigation the Division also checked the local exhaust ventilation of electroplating tanks.

* * * * *

CONNECTICUT

Over 400 industrial safety and health workers attended the first annual conference of the Connecticut Safety Society held at the Taft Hotel. New Haven, March 19, 1946. The morning session, on industrial safety, was addressed by J. J. McCarthy, Training Director at Gimbel Brothers; H. W. Heinrich of the Travelers Insurance Company; and T. O. Armstrong of the Westinghouse Manufacturing Company, Springfield. Afternoon speakers on industrial health included Dr. Ronald F. Buchan, Bureau of Industrial Hygiene; Dr. I. S. Otis, Commecticut Telephone and Electric Division, Meriden; and Dr. Crit Pharris, United Aircraft Corporation; with a summation by Lawrence Stadler, New Departure, Bristol.

Everett W. Martin, President of the Connecticut Safety Society, presided at the evening banquet, introducing the following speakers: Albert & Redway, representing industry; Dr. Albert S. Grax, medicine; Dr. Lawrence L. Bethel, education; and Lincoln Lippincott, safety councils.

The objectives of the Connecticut Safety Society, as given in the conference program, are:

"To promote the study of accident reduction and occupational disease control techniques, to enalyze Connecticut's industrial accident experience, to advance industrial safety supervision to professional status.

"To conduct an annual industrial safety conference.

Digitized by Google

Usos

final

"To publish * bi-annual known as the 'Connecticut Journal of Industrial Safety'.

"To serve as an information center for Connecticut industry."

* * * * *

DISTRICT OF COLUMBIA

Among the reports in the national survey of industrial nurses conducted by the American Association of Industrial Nurses is the one made by the local committee in the District of Columbia who reports a 40 per cent reply from the questionnaries distributed.

Since the majority of industrial nurses in the District are employed by Government agencies whose practices are uniform, and the returns from private organizations are believed to be complete, it will be possible to make an accurate analysis of the professional status of District industrial nurses.

When reports of these questionnaires are received from all States, the American Association of Industrial Murses will be able to recommend good standard personnel practices which will be helpful not only to the approximately 12,000 industrial nurses in the United States but to the management of plants employing the nurses.

* * * * *

GEORGIA

Certain occupational diseases were made compensable by a scheduletype amendment to the existing Workmen's Compensation Law. This was enacted into law during the January session of the Legislature. The Bill provides coverage for twenty-five selected toxic materials and provides for compensation in cases of disability resulting from such exposures. Routine preplacement examinations are required for all workers exposed to silica dust.

An important feature of this Bill is the provision of a Medical Board consisting of five members appointed from names selected from the Medical Association of Georgia. The principal function of this Board is to make final decisions as to any controversial matters of medical fact.

The Bill also provides that all occupations found to be hazardous and all cases of occupational diseases which are filed in the office of the State Board of Workmen's Compensation shall be reported to the State Board of Health.

Requests have been made for county-wide chest X-ray and blood test surveys by Columbus, Macon, and Augusta. In the functioning of such mass studies, a considerable portion of the adult population is included by direct industrial plant surveys. In the case of Columbus, an agreement has been made between the industrial plants and the County Health Department by which all new employees will receive a free chest X-ray as part of the pre-placement examination.

* * *

Two cases of acute lead poisoning have recently come to the attention of the Industrial Hygiene Service. These have resulted from the burning of old battery cases in open grates. The details of this occurrence along with the extent of potential exposures resulting from using this material as fuel is under investigation.

* * *

An unusual case of carbon monoxide poisoning was recently investigated by the Industrial Hygiene Service. This occurred in a family occupying a war housing unit. The source of carbon monoxide was a small coal-fired heating unit. Occupants of the spartment closed the damper on the line leading from the stove to the chimney and retired for the night. They were found unconscious approximately twenty-four hours later. In due time they recovered. On reproducing the physical conditions under which this exposure occurred, 550 p.p.m. of carbon monoxide were observed in the apartment.

* * * * *

INDIANA

During the months of December, 1945, January and February, 1946, there appeared an increased incidence of dermatitis throughout an asbestos brake lining and clutch facing plant. Epidemiologically no one process could be incriminated, for cases were scattered with practically every job involved, and at least nine chemicals could have caused the dermatitis.

The distribution of the dermatitis was chiefly on arms, legs, and belt line. Lesions were essentially mascular with some vesication. Practically all gave a history of about two weeks' exposure prior to developing a dermatitis. Approximately 12 to 15 per cent of the working population was affected.

Due to the magnitude of the problem, complex chemistry involved, and lack of experience in a brake lining industry, the consultation of Dr. Louis Schwartz, U. S. Public Health Service, was requested. It was found that the workers were sensitive to a liquid phenol formaldehyde resin, used in the majority of clutch facing formulas. The clutch facings were processed throughout the plant which accounted for the general distribution of cases.

Sensitivity was demonstrated by Dr. Schwartz through patch tests which were further confirmed through the two-week incubation period noted by the workers. The increased incidence during the months stated was probably due to the fact that during these months the plant hired many new workers, especially returned veterans. This constituted a large susceptible group. By reducing this labor turnover a hardened group can be developed. This will constitute the major part of the control program. Other factors in the control program include the standard procedures used in epidemics involving a contact dermatitis.

* * *

The Division of Sanitary Engineering was contacted by a local health officer when over thirty cases of diarrhea occurred within two days in a glass plant located in a small town. This Division requested the Division of Industrial Hygiene to observe the industrial processes in order to evaluate the possibility of some chemical in the atmosphere producing the diarrhea. This theory was readily disproved, and through diligent searching the sanitary engineers uncovered a cross connection in the water supply. The cross connection included a polluted surface water supply, a well, and the town water system. Details of this epidemic are reported in the "Monthly Bulletin - Indiana State Board of Health" - February, 1946.

* * * * *

MINNESOTA

The Minnesota Murses in Industry, Inc., staffed a booth at the Engineering Exhibition at the Minneapolis Armory. Experienced nurses gave information in regard to the work of nurses in industry and distributed literature on various phases of industrial health service.

* * *

The University of Minnesota is offering an Institute for Industrial Murses at the University Center for Continuation Study on May 16, 17, and 18. This intensive course has been planned with the cooperation of the Division of Industrial Health, Minnesota Department of Health, and the Minnesota Murses in Industry, Inc.

* * * * *

TENNESSEE

A study of the shoe industry has been started in Tennessee and will be completed during the next few months. This is a function of the central office.

Mr. Francis P. Jung, formerly P. A. Engineer, U. S. Public Health Service, attached to the Maryland Department of Health, has reported for duty and will be assigned to the West Tennessee District with headquarters in Memphis.

VIRGINIA

Complaints concerning the presence of obnoxious gases in an apartment over a garage were received by a local health office in Virginia and investigated by the Bureau of Industrial Hygiene. The occupants of the apartment became nauseated and some were ill from these fumes. The investigation revealed that the garage and apartments were practically new but were rather poorly constructed, and the floors and baseboards in the apartments contained a number of cracks which would allow the gases from the garage to seep into the apartments.

Tests with the carbon monoxide indicator did not show the presence of any carbon monoxide at the time of the investigation. However, since no provisions for a local exhaust had been made in the garage a sketch of such a system was sent to the garage owner, and he was urged to install this system immediately to prevent concentrations of carbon monoxide and other gases from building up.

7 7 7 7

WASHINGTON

A course in "Industrial Hygiene and Toxicology" giving 3-hours college credit is now available through the Extension Division of the University of Washington. The course is presented by Dr. L. M. Farner, Head, and C. D. Yaffe, Chief Engineer, of the Industrial and Adult Hygiene Section of the State Department of Health in 2-hour lectures given over a period of four months. Assisting Dr. Farner are Dr. Howard Lundy, Head of Public Health Education Section, State Department of Health; Dr. Alex D. Campbell, Seattle Dermatologist, and Mr. Keith Twitchel, Assistant Supervisor of Safety, State Department of Labor and Industries. Among those attending the present series of lectures are students from the University School of Nursing, nurses from industry, representatives of the State of Washington Department of Labor and Industries, an industrial safety engineer, and a health education director.

LECTURE AND DISCUSSION NEWS

One of the most successful of the Industrial Nurses Institutes was held this spring in Milwaukee, Wisconsin, when 255 nurses registered attendance. They represented 119 plants with nursing services out of a possible 214 in the State. The Institute was sponsored by the Industrial Nurses Section of the Wisconsin State Nurses Association in cooperation with the Industrial Hygiene Unit of the Wisconsin State Board of Health.

* * *

Students in Sanitary Engineering at the University of California will be required in the future to take the course in "Industrial Hygien".

Dr. Robert A. Kehoe recently addressed a joint meeting of the Georgia Section of the American Industrial Hygiene Association and the Georgia Society of Safety Engineers. Dr. Kehoe discussed community and industrial aspects of lead poisoning and illustrated his presentation with slides. Following Dr. Kehoe's talk, Mr. Charles Dudley, Managing Director of the Associated Industries of Georgia, presented a digest covering the new occupational disease law.

* * *

At the spring meeting of the International Plate Printers Union, Washington, D. C., Dr. Paul Campbell, U. S. Public Health Service, talked on skin hazards in the printing industry. Aided by slides, Dr. Campbell demonstrated dermatitis caused by solvents used for cleaning plates and the types of scaps recommended for cleaning the dye from printers' hands.

* * *

Robert J. Owens, Director, Division of Industrial Hygiene, Colorado State Department of Public Health, spoke before the Colorado Society of Safety Engineers on "Industrial Hygiene and Safety Programs of the U. S. Army."

* * *

"Dermatophytosis in Industry" is the title of the exhibit to be presented by the Dermatoses Section of the Industrial Hygiene Division, U. S. Public Health Service, at the June convention of the American Medical Association. The exhibit by Dr. Louis Schwartz, Dr. Samuel M. Peck, and Dr. Isadore Botvinick was prepared by the Graphics Section of the U. S. Public Health Service.

PUBLICATIONS OF INTEREST

"Lead Poisoning and Compensation" by May R. Mayers, M.D., is the subject of a reprint released by the Compensation Medicine Publishing Company, Inc., 270 Broadway, New York 7, New York. Dr. Mayers' clear presentation of the facts makes this paper a valuable contribution to the subject of lead poisoning. This is particularly useful in that it clarifies the diagnosis of lead poisoning which should be helpful in discriminating between lead absorption and lead poisoning with reference to compensation problems affecting this occupational disease. Dr. Mayers, who is a member of the Committee on Lead Poisoning, American Public Health Association, is Chief of the Medical Unit, Division of Industrial Hygiene, New York State Department of Labor.

A Directory of Agencies for Industrial Health Personnel Placement has been prepared by the Health Advisory Council of the Chamber of Commerce of the United States, and may be had by writing to that organization in Washington, D. C.

Physicians, dentists, nurses, sanitary engineers, and other professional and technical people returning from military service are seeking professional connections in industrial health programs, and industries are seeking industrial health personnel. Many national, State, and local health agencies, both governmental and voluntary, are receiving inquiries from both groups.

The Health Advisory Council believes that this list will be useful in bringing together industries and personnel interested in industrial health service.

* * *

Formaldehyde is the subject of a Chemical Safety Data Sheet recently released by the Manufacturing Chemists' Association of the United States. The publication outlines the physical, chemical, and hazardous properties of formaldehyde as well as a condensed list of instructions concerning the safe handling of the usual shipping containers.

Formaldehyde, as the manual sheet points out, irritates the skin, eyes, nose, and throat. The characteristic symptoms are burning of eyes, weeping, and irritation of upper air passages. Especially sensitive workers may develop dermatitis of face, neck, arms, and other parts of the body unless strict sanitary precautions are observed. Formaldehyde is widely used as a disinfectant, germicide, fungicide, and preservative. It is used in the chemical industry, especially in the manufacture of certain plastics, in breweries, tameries, textile, paper and pulp mills, photography, and the preparation of dyes.

First aid instructions are included in this outline of pertinent information about formaldehyde. Copies are priced at 15 cents and supplied by the Manufacturing Chemists' Association, 608 Woodward Building, Washington 5, D. C.

* * *

A resume of the proceedings of the Twelfth National Conference on Labor Legislation which was held in December, 1945, is printed and ready for distribution. The Bulletin No. 76 is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., price 10 cents.

* * *

Publication of "Nursing in Commerce and Industry" by Bethel McGrath has been announced by the publishers, The Commonwealth Fund. Mrs. McGrath is Chief Industrial Nursing Consultent for the American Association of Industrial Nursing.

PERSONNEL NEWS AND NOTES

Dr. Harry Wilson has returned from service in the Army to resume his position as Director of the Division of Industrial Health, South Carolina State Board of Health. Dr. G. H. Zerbst, who acted as Director of the Division during Dr. Wilson's leave of absence, has been seriously ill and is on leave at the present time.

* * * * *

Mrs. Ella May Watson, Industrial Nursing Consultant for Northern California, resigned March 31, 1946.

* * * * *

Dr. James G. Townsend, Chief, Industrial Hygiene Division, U. S. Public Health Service, was a guest at the two-day meeting of the Council on Industrial Health of the American Medical Association held in Chicago in March. Representatives from other councils interested in industrial hygiene also met with the group.

* * * * *

Oscar J. Sobol, P. A. Engineer (R), was transferred on March 15 from the Virginia Bureau of Industrial Hygiene to UNRRA. After taking a month of training, Mr. Sobol will be assigned to a position in a foreign country.

* * * * *

Miss Elizabeth A. Neubert, formerly a Captain in the U. S. Army Nurse Corps, joined the Industrial Hygiene Service, Tennessee Department of Public Health, and will work in all parts of the State.

* * * * *

Marion F. Trice is now Chief Industrial Hygiene Engineer, Tennessee Department of Public Health. The engineering work in the Central District will be carried on by Mr. Trice and Forrest H. Bumford, P. A. Engineer, W. S. Public Health Service (R), who is on a temporary assignment to Tennessee.

* * * * *

Mrs. Jane W. Voscek, R.N., has accepted the position of industrial hygiene nurse on the staff of the Bureau of Industrial Health, New Jersey Department of Heelth.

Mr. Joseph A. Rzigalinski, Ch.E., is another new member of the New Jersey staff, having taken over the responsibilities of an industrial hygiene engineer for the Bureau of Industrial Health.

Lt. Col. R. T. Homewood, who had been on military leave from the Virginia Department of Health since 1942, has returned to assume the duties as engineer with the Bureau of Industrial Hygiene.

* * * * *

Mr. Paul Giever has been added to the staff of the California becartment of Public Health, with Bureau headquarters at Berkeley. Mr. Giever worked for several years as mining and industrial hygiene engineer for a Colorado mining company, followed by three years in the U. S. Army. During most of his Army career, he was assigned as Industrial Hygiene Engineer at the Sacramento Air Depot.

* * * * *

Mr. Roland E. Byrd has accepted the position of Industrial Hygiene Engineer with the Division of Industrial Hygiene, Arkansas State Board of Health. Mr. Byrd who was a lieutenant in the U. S. Navy (R) served almost four years with the Medical Department. At Pearl Harbor he was Engineer in Charge of Industrial Hygiene work on raising the sunken ships in the harbor. This assignment consisted in examining the working conditions in the various holds underneath the water and devising exhaust ventilation equipment to remove toxic gases and fumes.

* * * * *

Mr. W. E. McCormick, formerly with the U. S. Public Health Service, stationed in North Carolina, has accepted a position with the Industrial Hygiene Service of the Georgia Department of Public Health.

* * * * *

Dr. James Q. Gant, Surgeon (R), who was inactivated in April, is opening a private practice in the District of Columbia. He has accepted a part-time appointment as dermatologist for the District of Columbia. Health Department.

* * * * *

Dr. F. H. Goldman, Chief, Chemical Unit, Industrial Hygiene Division, U. S. Public Health Service, recently visited Charleston, West Virginia, in connection with the air pollution study in progress there.

* * * *

Mr. A. T. Rossano, Jr., new Director of the Alabama Division of Industrial Hygiene, addressed the March meeting of the Alabama Society of Safety Engineers. At this meeting he showed the film entitled "The Air We Breathe," which was recently produced by the Mine Safety Appliances Company.



In March Mr. Rudolph P. Lewis, Chemical Engineer; joined the staff of the Alabama Division of Industrial Hygiene. Mr. Lewis was recently released from active duty in the Army where he attained the rank of Lt. Colin the Artillery.

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