

sation law, injuries are reportable to the Industrial Accident Commission and are adjudged for compensation under it. The term *injury* as used in this law, includes any injury or disease arising out of employment, including injuries to artificial members.

Legally, occupational diseases as such are not recognized, but under the definition of injury all occupational diseases are covered. The law is therefore a complete coverage, or blanket, occupational disease, as well as injury, law.

Since this law has such broad coverage, many illnesses are reported which do not appear in the reports of many other States. For example, many infectious diseases have been ruled compensable when they have been contracted by medical and nursing personnel from contact with patients. Upper respiratory infections contracted as a result of exposure to inclement weather, and tenosynovitis are other examples.

The term "compensation" defines both treatment and indemnity payment, and is furnished as follows: "All medical, surgical and hospital treatment including medicines, medical and surgical supplies, crutches and apparatus, including artificial members that may be reasonably required to cure and relieve from the effects of the injury." Treatment must be given for any injury or illness arising out of the employment although no indemnity is paid for the first 7 days of the disability.

In as much as the employer is liable for the immediate treatment and the law is well enforced, practically all injuries or illnesses are reported. When the employee first appears for treatment, an initial report is sent to the Industrial Accident Commission by the attending physician or surgeon.

The Bureau of Adult Health of the State Department of Public Health, through an agreement with the Department of Industrial Relations receives from the latter's Division of Labor Statistics and Research a copy of all injury reports which are considered to be occupational diseases. These first reports are studied and followed up by the Bureau of Adult Health and each month summaries are prepared of all the cases reported. For several years 1,000 to 1,200 of these initial reports of occupational diseases have been received and studied each month.

SILICOSIS—

(Continued from page 5)

centage of free silica indicates that the amount of free silica of respirable size in the atmosphere is not sufficient to produce the variations noted in the time indicated. However, there is enough iron oxide in the air to cause them.

In an effort to determine whether this dust can produce silicosis we have been conducting experimental work at the Saranac Laboratory for the past year and a half. Animals exposed to typical concentrations of particles collected in the foundry cleaning room have shown no evidence of the disease thus far. Moreover, there has been no tendency to activate tuberculosis in those animals experimentally infected. The reaction resembles that produced by other inert dusts. The study will be continued for at least another year when a complete report will be made. It is hoped that the results of this work will aid materially in the proper evaluation of occupational disease and discourage the diagnosis of silicosis based on improper and inadequate claims. Until sincere consideration is given to the hygienists' findings, erroneous decisions are going to be made.

Heretofore, the accumulation in the lungs of dust particles below one-half micron in size has been considered of little consequence. Recent studies by Hatch and Kindsvatter, however, have shown very clearly that exposure to low mass concentrations of quartz particles, smaller than one-half micron, results in significant alveolar retention in test animals and produces demonstrable lung change in a relatively short time. It is pointed out further that because of the known pathogenicity of quartz with decreasing size, particles below one-half micron may be of greater importance in the etiology of silicosis than is commonly thought. In this connection, the use of the electron microscope may well result in revision of much of our present thinking on the part played by submicroscopic particles in the production of occupational disease.

The injection of recent observations into the study of silicosis should provide the stimulus for more intensive research since the problem is far from solved.

While it is true that there is still much to learn about silicosis it should not be assumed that definite standards for diagnosis and control of the disease do not exist. Present day methods which take into account such essentials as a complete occupational history, accurate evaluations of exposure to respirable sized particles of harmful dusts, adequate physical examinations and intelligent interpretation of satisfactory chest roentgenograms, have been very effective in establishing the existence of this occupational condition. Periodic employee health examinations, including chest X-rays, provide an efficient adjunct to engineering and hygienic control of the hazard, while the sensible application of sound ventilating principles will result in safe atmospheres and better places to work.

Reference

Hatch, F. T., and Kindsvatter, V. H.: Lung Retention of Quartz Dust Smaller than One-Half Micron. *J. Indust. Hyg. & Toxicol.*, 29: 342-346, September 1947.

EXHIBITS

(Continued from page 14)

purpose of the exhibit, the basic idea, the facts to be presented, the technique to be used, and a budget of the probable expense.

A preparatory sketch showing floor and wall space, partitions, panels, electrical installations, color, and captions.

All-inclusive copy of captions, explanatory matter, charts, slogans, diagrams, and other written, drawn, or printed matter.

A budget showing probable preparation, construction, and operation expenses.

While such a procedure may seem rather formal for some of the simple exhibits set up locally, the beginning exhibitor might be surprised at the good effect achieved by the discipline of a little paper work.

A simple and usable bulletin for the amateur exhibitor is *Exhibits, How to Plan and Make Them* issued by the National Publicity Council, 130 East 22nd Street, New York, N. Y. (60 cents).

U. S. GOVERNMENT PRINTING OFFICE: 1944