

while a great deal has already been done in controlling the well known occupational diseases, the continuous cropping up of new problems as well as new phases of old problems requires constant vigilance.

Some idea of the types of investigations undertaken may be obtained from the following illustrations. During the reporting period, the Indiana Division of Industrial Hygiene investigated four deaths and numerous cases of arsine poisoning, and the Illinois division two deaths from arsine poisoning due to handling an arsenic-bearing dross in a lead-refining process. The West Virginia bureau investigated a severe outbreak of chloracne which resulted from the blowout of an autoclave making trichlorophenol; 80 workers were affected. The Massachusetts division investigated a plant where three workers became seriously ill as a result of cleaning jackets in a fluid containing carbon tetrachloride. The same solvent was responsible for two deaths in a Kentucky plant where carbon tetrachloride was used to remove paint from aluminum pans without the use of protective devices.

The Pennsylvania bureau made a study of ozone generators in garages in a 12-county area and found that their use introduced ozone gas into the garage air in potentially harmful concentrations. Several agencies—among these, Mississippi, Minnesota, Oklahoma, and St. Louis—completed studies of solvent hazards in dry-cleaning establishments. The Minnesota division, for example, discovered that 10 per cent of the plants surveyed were using halogenated hydrocarbons in excessive concentrations, which accounted for complaints of illness among the workers.

The use of gas heaters in an enclosed space, particularly in tourist courts, has resulted in a number of deaths, and represents another type of problem coming to the attention of industrial hygiene agencies. The Georgia division, in cooperation with a local university, and with the aid of a Public Health Service grant, is engaged in a research project on carbon monoxide, whereby the division hopes to determine the minimum ventilation requirements for the safe use of space heaters.

Common but still troublesome problems encountered are those associated with dust control, particularly silica. For example, an intensive granite dust control program, including x-raying of the chests of workers exposed to silica and other dusts, has been in effect in Vermont for at least 12 years. Yet, last year, during an inspection of every granite shed in the state, 39 per cent of the local exhaust units in use were found below standard, requiring repairs or alterations in order to meet the minimum standards of operation.

Another outstanding activity of the Vermont division was the assistance it gave the granite quarries in arriving at a solution of the dust problem by introducing wet drilling. Numerous obstacles had to be overcome because of the tremendous size and depth of the quarries, and the severe winters, but all five quarries will have completed the conversion process in the near future.

The divisions in North Carolina, New Hampshire, and Vermont have programs for routine x-raying of workers in the dusty trades. The North Carolina division reported that during 1949, 16 cases of silicosis and 34 of asbestosis were found among a group of 1,842 workers examined. This group comprised 36 per cent of all exposed workers in the state. In several states, mass x-ray case-finding programs have served as a means of uncovering cases of silicosis and have given some idea of the incidence of this disease. For instance, the Cleveland bureau received 218 case reports in one year, and the Detroit bureau received 205.