

intervening years. Most occupational disease reports fell into the categories of skin and eye conditions and chemical burns. The causative agents most frequently mentioned were poison oak, acids and solvents. Respiratory conditions and systemic effects due to toxic materials, while less frequent, tend to be more severe; of all workers with occupational disease, the proportion of workers losing time from work for these conditions is almost twice that of all workers. One-third of the 558 reports of systemic effects of toxic materials in 1965 implicated agricultural chemicals. Although relatively few reports were received concerning such classical hazardous agents as carbon monoxide (58 reports), lead (55 reports), carbon tetrachloride (31 reports) and mercury (26 reports), these are significant because the principles of environmental control for all of these have been well understood for a long time and they indicate the need for education and enforcement. The use of atomic energy in industry, the introduction of new tools and machines and the mechanization of processes and services have increased the risk to such hazards as noise, vibration and ionizing radiation. Among all major industry groups, agriculture, as usual had the highest rate of occupational disease (13.5 reports per 1,000 workers); followed by manufacturing, 7.8; and construction, 7.7. Rates for production workers within manufacturing fluctuated from 2.8 reports per 1,000 workers in ordnance to 39.9 per 1,000 workers for the chemical industry.

Chemical and allied products accounted for nearly 90 percent of the total of 1,226 occupational disease reports. The most frequently identified causative agents were acids, 16 percent of the cases; solvents, 11 percent; agricultural chemicals, 9 percent; alkalis, 8 percent; gases 5 percent and plastics 5 percent. Chemical workers in this series had a somewhat higher proportion of respiratory conditions and systemic effects (poisoning) due to toxic materials than workers in general. Most of the reports of poisoning among chemical workers implicated organic phosphate pesticides. Gases, solvents and agricultural chemicals were most frequently mentioned on reports of respiratory conditions due to toxic materials. Production workers in rubber and miscellaneous plastic products had the second highest rate in manufacturing (21.3 reports per 1,000 workers). Plastics accounted for 15 percent of the 509 cases reported for production and nonproduction workers in this group; solvents for 13 percent; dust, 10 percent; and acids, 6 percent. Dermatitis, conjunctivitis and chemical burns were the most frequently reported conditions. The proportion of reports attributed to respiratory conditions was 7 percent, or nearly one and a half times the proportion of respiratory conditions for all manufacturing workers in this series.

Another high-rate manufacturing industry was electrical machinery, equipment and supplies with 19.0 reports per 1,000 production workers. These workers manufacture electrical measuring instruments, test equipment, transformers, motors, generators, carbon and graphite products, household appliances, electric lamps, etc. The production workers accounted for over 90 percent of the 1,942 reports for this industry. Acids, solvents, plastics, metals and dust were frequently implicated. Skin problems, chemical burns and eye conditions constituted over 90 percent of the reports. These three conditions are most frequently listed for all industries. Workers in fabricated metal products, another high-rate industry, 17.5 occupational disease reports per 1,000 production workers, produce a variety of metal products including cans, hand tools, general hardware, nonelectrical heating apparatus and plumbing fixtures, structural steel, metal doors, sash, frames, sheet metal work, screw machine products. The industry also includes shops where plating, galvanizing and coating of metal takes place. As for almost all manufacturing categories, acids were implicated most frequently with 26 percent of the 1,352 reports of occupational disease among all workers in fabricated metals. Solvents were second with 12 percent; followed by metals and their compounds, 9 percent (chromium plating compounds, zinc and nickel were most frequently identified); petroleum fractions, 7 percent; and alkalis, 6 percent. The uses and limitations of the occupational disease reporting mechanism in the surveillance of occupational health are discussed.

Methods proposed in the Frye Report (see Editorial in November 1966 Industrial Hygiene Digest), will be developed by the Bureau: sample monitoring will provide current information about the work environment. Questions which can be answered by sample monitoring concern the number of workers exposed to a given hazard and the extent and adequacy of the controls used to protect them. For example, how many workers in California are being exposed to beryllium and with what degree of safety is this chemical being used? From these findings, recommendations can be made for improvement in controls leading to prevention of occupational disease. Also, a systematic analysis of technological trends, will permit the staff to anticipate occupational health problems and determine the direction of surveys and other studies. Epidemiological and other statistical methods are techniques already widely used in the Bureau of Occupational Health. -- Abstracted from Summary & Text of Rept.

Editor's Note: Interested readers should also read The Linton Report, which is reviewed in this issue (item 1131).

-- R. T. P. deT.