

DEALING WITH THE HIDDEN HAZARDS

Most of the controversy surrounding the Occupational Safety and Health Administration has centered on the agency's safety rules, i.e., with accident prevention. But the new law also established a two-part program to eliminate occupational health hazards. And this may create even more complicated problems for the nation's employers. The conditions that threaten accidents are usually easily recognized. But chemicals and other toxic agents that workers must handle and breathe are sometimes difficult to perceive. Even when health hazards are obvious, only experts can measure them accurately—and even they cannot always predict the long-term effects. Today, by some estimates, a new chemical goes into industrial use every twenty minutes. The toxic effects of many of these chemicals are unknown.

OSHA itself has responsibility under the law to find occupational threats to health. Unfortunately, its staff is woefully inadequate: fifty full-time industrial hygienists are scattered thinly across the country. This fact reflects a national shortage of such specialists. One OSHA official says there are only 560 certified industrial hygienists in the U.S., with 1,400 others in training but not yet certified. "To do the job well," he adds, "we would need 8,000 to 9,000."

Even if the new agency had all the hygienists it needs, it would still be far from solving the problem. For the government has been laggard in conducting the research needed to identify hazardous substances and to establish the human tolerance levels for them. Until passage of the OSHA law, the federal government's annual expenditure for studying occupational health hazards never topped \$18 million.

The law creating OSHA upgraded the Department of Health, Education, and Welfare's long-established Bureau of Occupational Safety and Health to the status of National Institute for Occupational Safety and Health (NIOSH). But its budget remains at a modest level (\$30 million this fiscal year) and it is still under the control of HEW—which, critics charge, never showed much interest in occupational health problems in the past. Dr. Marcus M. Key, the director of the institute, says that its biggest problem is that, although it is a scientific organization whose personnel must be qualified to carry out sophisticated research, the average grade level (hence, salary level) of its 700-man staff can be no higher than that

of HEW's enormous staff of bureaucrats.

Nevertheless, it is NIOSH's job to provide the research that will enable OSHA to regulate exposure to hazardous substances and conditions. It's a formidable task. Scientists have identified some 16,000 potentially toxic substances, and human tolerance levels have been established for only about 400 of them. These "threshold limit values"—defined as the concentrations to which most workers can be exposed in an average workday without adverse effects—were previously set by the American Conference of Governmental Industrial Hygienists. NIOSH must redefine all of the TLV's, which union critics insist are much too permissive.

Counting the fibers

In the year and a half since it started work, NIOSH has been able to establish hazard criteria for only five substances and conditions—asbestos, carbon monoxide, beryllium, noise, and heat. Eventually, Dr. Key hopes to turn out criteria for fifteen to twenty materials a year, but even that level of production seems inadequate.

The experience with asbestos indicates just how difficult setting standards can be. Dr. Irving J. Selikoff of the Mount Sinai School of Medicine in New York, the leading researcher into the effects of asbestos, asserts that even brief exposure to small quantities of the ubiquitous insulating material can produce lung cancer. His studies have already resulted in a ban on spraying the material on the steel framework of new buildings in a number of cities. When OSHA's initial standards fixed a limit of twelve asbestos fibers per cubic centimeter of air, the A.F.L.-C.I.O.—citing Dr. Selikoff's work—registered outrage. Last February, NIOSH proposed that the limit be lowered to five fibers right away and, after two years, to two fibers. In June OSHA set the standard at five fibers per cubic centimeter for four years, two fibers thereafter.

Neither labor nor management is satisfied with the result. An official of the Asbestos Information Association claims that companies using the material will have to spend \$150 million on new equipment in order to comply. A number of companies, in fact, have abandoned asbestos in favor of other insulating material. Yet Dr. Selikoff insists that even the two-fiber standard means "coming decades of disease and death in American industry."