

### THREE CHALLENGES FOR OCCUPATIONAL MEDICINE

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It is gratifying to note that a number of NIOSH physicians and other scientists are taking an active part in the program of this Congress on occupational health. This participation reflects the mutual concerns and interests of the National Institute for Occupational Safety and Health and the American Medical Association in occupational medicine and in its practitioners. We appreciate the constructive comments and the support received from your professional organizations and from you as individuals, and we look forward to continuing this close relationship.

In these days of accelerating knowledge about occupational hazards, and of expanded efforts by health and safety professionals to prevent disease and injury, we are making progress in our national effort to protect our working men and women. But progress and problems seem to go hand in hand. We tend to view problems as obstacles, but today let us focus on three of these problem areas and consider them not as problems but as challenges for action, with the aim of spurring serious thought and constructive suggestions. These three challenges are: credibility, professional health manpower, and institutional issues.

#### CREDIBILITY

The Occupational Safety and Health Act of 1970 requires the establishment of health and safety standards. Included in this requirement is the provision that all sides of the issues involved should be openly examined through a clearly defined series of procedural steps.

An adversary relationship has dominated many of these procedural steps. As a rule, industry has favored less stringent standards than those recommended by Government or by labor. Since the overwhelming majority of occupational health physicians and nurses are employed by industry, it has been too easy for some to assume that these professionals uniformly oppose the stringent regulation of occupational hazards. This feeling has been voiced despite the fact that occupational physicians and nurses labored for many years to focus the attention of management, labor, and Government on occupational safety and health problems and to urge that substantial effort be directed toward solving these problems. For a number of reasons there seems to be much less of an undercurrent in regard to the roles of safety professionals and industrial hygienists.

Because of our dependence on the adversary process to reach the goals of occupational laws, there is every likelihood that even the most responsible segments of American industry will be viewed as having a negative attitude toward any national effort to achieve a safer and more healthful work place. This issue of credibility is very important to us. It is important that occupational physicians and American industry should pause and carefully consider how Government, labor, and industry can build both credibility and a greater degree of mutual respect.

Here are five suggestions for action on which your comments or further suggestions would be welcomed by the Institute:

1. Occupational physicians in American industry should emphasize the positive steps which they are taking to solve occupational health problems and to meet other occupational challenges. The reductions in exposure to vinyl chloride monomer, for example, constitutes a real success story. Today's presentation of the Physician's Award by a representative of the President points up the tremendous contribution made by occupational physicians in matching the persons that are handicapped to available and appropriate jobs. These are achievements that the public does not generally hear about.

2. Occupational physicians, Government, industry, and labor must develop a variety of cooperative relationships. Personnel exchanges involving labor, universities, Government, and industry would be one approach. Each of these sectors has expertise needed by others. In NIOSH, for example, we need to utilize the skills of people who have had actual experience with in-plant occupational problems, particularly in the areas of occupational medicine and occupational nursing. These professionals that spend a period of time in such a Governmental setting will, in turn, gain an understanding of the factors involved in setting priorities for our limited manpower and dollars; in developing health and safety standards; and in identifying trends and needs in occupational health and safety. Establishing these cooperative arrangements may present some obstacles and would require considerable effort to establish but, once started and shown to be successful, the system would undoubtedly continue because such an exchange of expertise can be beneficial to all sectors.

In another type of cooperative relationship, joint labor-management committees to plan and review research projects have proven their worth. The establishment of tripartite groups including Government, industry, and labor could provide an excellent mechanism for planning and review of Federal research efforts and for assuring that our inputs into the regulatory programs are people-oriented, not agency-oriented.

Such committees are now active in the rubber, painting, and grocery industries. Each committee started from the joint interest of labor and management and not as a result of governmental urging. They all appear to be doing a fine job. They can help us remember that the

important thing is not to achieve a certain, perhaps arbitrary, reduction in exposure but to protect employees and to see that workers have productive jobs.

3. Occupational health professionals and American industry can and should assume a lead role in developing options to stimulate both the entry of new professionals into occupational health practice and the training of health professionals. If our occupational physicians and nurses would carefully evaluate the available options and give us the benefit of their considered opinions and recommendations, we would be in a position to take a positive stance on many controversial educational issues and we would present a united front to the public in helping people understand the problems and the actions planned.

4. Health professionals in industry must work together with labor and government to assure the availability of unreported or proprietary information that bears directly on a health problem. A few American industries do a good job in making such information available. Frequently, however, important data comes to light after proposed health standards have been developed. In some sections, there is a tendency to withhold pertinent information until the public hearings so that it will have more impact on decision-making. This has the effect of creating a number of legal difficulties, delaying the standard setting procedures, and may result in reducing the protection afforded to employees.

5. Occupational health and safety professionals should take a more active role in suggesting and demonstrating ways to provide occupational health and safety services to employees of smaller companies. We continue to have problems with classical safety issues and occupational diseases in small industries throughout this country, and reliance on standards and inspections is just not going to solve these problems. Many large establishments have occupational safety and health programs of recognized excellence, yet there is no organized effort to utilize some of this expertise to chart paths that could be followed by smaller plants and businesses in providing such services to their employees. Here, too, we would like to see a triumvirate of industry, government, and the private sector working together to develop and promote effective health and safety services for all workers.

#### OCCUPATIONAL HEALTH MANPOWER

The National Institute for Occupational Safety and Health has the legal obligation to train occupational health professionals, and the Department of Labor has a similar legal obligation for the training of employees and employers. The Institute has expended most of its limited resources for manpower on the education of industrial hygienists and safety engineers. We recognize that much less than a fair share has been devoted to solve manpower problems involving physicians and nurses, and we do intend to have a better balance in our training efforts for these disciplines in the future. This will

undoubtedly help. However, despite the full utilization of Federal resources, there will continue to be a serious shortage of qualified professionals available in occupational medicine and nursing. Such a shortage will severely weaken the regulatory efforts proposed by the Government. Recently, Dr. Theodore Cooper, Assistant Secretary for Health, testified on health manpower issues before the Health Subcommittee on Labor and Public Welfare of the United States Senate. He pointed out that our problem is not the total number of physicians available but rather a shortage in certain types of physicians and in certain geographical areas. A major Federal investment in medical schools has increased the physician supply but has not remedied these defects. Clearly, financial support is not the whole answer. Dr. Cooper, did, however, specifically advocate continued Federal support for occupational medicine training programs and for other occupational health disciplines.

A major problem in occupational health manpower is the recruitment, training and retaining of physicians and nurses. Occupational medicine, like other aspects of preventive medicine, usually receives little emphasis in medical schools and little more in schools of nursing and public health. Our Institute will be working with the Health Resources Administration to seek remedies for this, but this will be a lengthy process. Professional schools are usually modestly funded and occupational medicine sections lack the service income generated by most specialty departments. Stipends for training also tend to be lower, so that a physician entering a formal training program often finds himself faced with a substantial reduction in salary. This is certainly not an inducement to enter the field of occupational health via this route.

NIOSH is strengthening its efforts to generate educational and training materials in occupational medicine and nursing and we will be working with professional societies to explore ways in which we can work together to do a better job, including the difficult task of revising the curriculum of professional schools. Assuredly, we need more post-graduate training programs that lead to board certification. In a recent graduating class of 10,000 physicians, less than a dozen went into occupational medicine. We must improve this figure.

We need to encourage more programs of continuing education for health professionals in the field. One approach is the direct Federal funding of Regional manpower training programs, in which a major university might work closely with other educational institutions to provide training to health professionals and serve as a central training resources for the region.

Another option might be Federal regulations requiring accreditation of occupational health programs, thus stimulating free market forces to meet the required demand. As many of you are aware, there are controversies surrounding efforts of NIOSH and OSHA to develop guidelines for the accreditation of occupational health and safety programs. However, voluntary accreditation remains a viable option.

The Standards Completion Program of NIOSH and OSHA will require monitoring and medical resources that are now available. This regulatory route, with or without the accreditation provision, may come about much sooner than many people realize.

Manpower development could be supported in yet another way, and that is by a "tap" on compensation premiums or on health insurance premiums. The equity of this is appealing because the provision of adequate occupational health services should eventually lower compensation premiums. Finally consideration should be given to joint funding by labor and management. It is often difficult for an individual industry or company to support a physician or nurse for long term training. One problem is that there is no assurance that the professional will return to the company that has invested in him or her. Furthermore, there are many demands on corporate management. This is also true in government. NIOSH will be glad to work with the AMA, professional societies, the insurance industry, trade associations, labor, and other responsible groups to consider some options in this area.

#### INSTITUTIONAL ISSUES

Today's institutional problems will spawn most of the thorny technical issues of tomorrow. Let us consider how we are going to answer the following questions.

1. How can we build a community of mutual respect where the boundaries of scientific uncertainty limit industry, labor, and government to actions that allow adversary proceedings to develop in ways that truly serve the public interest? We must somehow isolate and focus upon substantive issues. We may have the legal manpower to do otherwise, but we certainly do not have the technical manpower. Inefficient use of technical manpower can be a powerful brake on the regulatory process. This should not be allowed to happen.
2. What will be our risk philosophy when we are confronted with the need to regulate several hundred carcinogens in the work place? NIOSH recently published a list of more than 1,500 suspected carcinogens. The International Agency for Research in Cancer has proposed a shorter but still lengthy list that should be regulated. It is important for American industry to think about this "sea of agents" that we are exposed to at varying levels, and think about the impact, not of any single agent, but of the cumulative effect of all of them. Can we continue to say that there is no safe dosage for industrial carcinogens? This is our position now. Can we afford to take a dose-response approach to single carcinogens without considering the aggregate effect of low level doses to many carcinogens? This is advocated by others now.
3. Will we be able to regulate occupational and environmental exposures on an industry-wide basis, rather than on an individual agent basis? In the long run, an industry-by-industry approach has

greater utility. Can we avoid regulating the wrong problems? Have we really appraised the total effect of regulations on the availability of jobs in industry? These are very difficult problems, but they cannot be ignored.

4. Will we recognize the long term implications of new industrial facilities? Today's new plant may contribute to chronic diseases in our grandchildren. Long plant life and extended latency periods lead us to believe that new plants may affect health for a period of 50 to 75 years. Would it not be more appropriate to find mechanisms that stimulate the development and deployment of safer, contained industrial processes? This is easier to say than to do.

5. Will we be able to overcome the problem of "future discounting"? Future discounting leads us to greatly discount events likely to happen in the future and to lightly bypass adverse effects occurring two or three decades in the future.

6. How can we take "credit" now for preventing chronic disease in future generations? Perhaps the trend toward large suits above workers' compensation awards might hasten the process. In other words, if we pay for our past maybe we will balance the tendency to discount future risks. There are several class action suits now that can threaten the capital structure of several industries. Surely these industries are even now taking a very serious view of any new health risks.

7. Can we to some extent use our past mistakes to motivate us to protect our future?

8. How will we meld occupational health and safety programs into our national healthcare system? There is a great need to plan for this during the next few months, and waiting until a national health plan is enacted means a loss of input at a time when it can affect national policy.

In many ways, the leadership that you as physicians can demonstrate and that your professional organizations can deploy are our most

important assets in meeting these three challenges. Your contributions as health professionals to develop consensus standards, to advocate legislation, and to promote educational efforts are good models for effective action.

Let us work together, so that tomorrow we will face a different set of problems with a confidence arising out of our successful solutions to the problems we perceive today.

# OCCUPATIONAL HEALTH AND SAFETY SYMPOSIA

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