TALK TO BE PRESENTED BY MARCUS M. KEY, M.D.

JUNE 17, 1971

AT THE

## AFL-CIO CONFERENCE ON THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

During the last 18 months the Bureau of Occupational Safety and Health in HEW has had two very important and very difficult pieces of legislation to implement-the Federal Coal Mine Health and Safety Act of 1969 and the Occupational Safety and Health Act of 1970. Under the Coal Act we were given the responsibility of conducting health research, setting health standards, and operating medical examination and autopsy programs. Under the Job Safety Act we acquired research responsibilities in both health and safety, received an education and training mandate, and became an Institute. As of April 26, our birthday according to Congress, we changed our name to the National Institute for Occupational Safety and Health and sent forward for approval the organizational chart and functional statement which had been recommended by a special task force headed up by the Surgeon General. Because of the review process and concurrent reorganizational changes in HEW, the final approval of our organization has been delayed, but is expected this week. HEW has recently announced that the new Institute will be administratively located in the Health Services and Mental Health Administration, which will permit close coordination with related HSMHA programs such as the National Center for Health Services Research and

Development and the Division of Federal Employee Health. The mix of program activities in NIOSH includes operation of preventive health programs and applied research, which are quite compatible with HSMHA's mission.

NIOSH will be organized functionally, rather than along disciplinary lines, there will be an operating division identified for each major activity, i.e. for health and safety research (Division of Laboratories and Criteria Development), industry-wide studies (Division of Field Studies and Clinical Investigations), hazard evaluations (Division of Technical Services), short-term training (Division of Training). These four Divisions will operate out of Cincinnati, Salt Lake City, and the Regional Offices, and their Directors will report to an Associate Director in Cincinnati who, in turn, will report to the Director of the Institute in Washington.

The Appalachian Laboratory for Occupational Respiratory Diseases in Morgantown will be elevated to division status and given the sole responsibility for implementing the Coal Mine Health and Safety Act. A new Division of Occupational Health Programs will be established in Washington to promote occupational health programs at the Federal and State levels as well as in industry and agriculture. This Division will also have the very important responsibility of correlating the practice of occupational medicine in industry with the total delivery of health services.

There will be several offices designated in Washington to interface with the Department of Labor. These include:

Office of Health Surveillance and Biometrics
Office of Manpower Development
Office of Research and Standards Development

Our technical services operations will be largely decentralized and will operate on a regional basis - the same regions that the Department of Labor uses. We now have four Regional Offices staffed, and by the end of the summer all will be staffed with 2 professionals and a secretary. Current plans call for a staff of 60 to be assigned to the regional operations by the end of FY '72; 55 of these will actually be located in the ten regional offices. Projections for Regional Office staffing have been made on the basis of the expected number of requests for hazard evaluations and may have to be reviewed upwards.

We also plan to operate monitoring and surveillance activities from the Regional Offices with 10 specially trained men to be assigned to the Regional Offices in November or December. These men, industrial hygienist surveyors conduct preliminary surveys to gather information for a national projection on the industrial hygiene problems in the U.S. Regional Offices will also provide assistance on State plans, contract and grant monitoring, training, and recruitment.

Now, let's take a more detailed look at some of HEW's major responsibilities: Health and safety research, industry-wide studies, hazard evaluations, and toxicity determinations, annual listing of toxic substances.

record keeping, and manpower development and training. Of the many different types of research which are authorized for HEW, the most important is that which produces criteria on which standards for toxic materials and harmful physical agents can be based. The criteria which HEW will transmit to the Department of Labor will not only contain all pertinent dose-effect studies with literature citations, they will also contain specific limit recommendations based on health effects. We will do feasibility studies and produce a manual of good practice for each substance for which we recommend a limit. The Department of Labor would, of course, have the responsibility for cranking in national interests and economic considerations, for publishing and proposed standards under proposed rule making, and for public hearings, if necessary.

HEW has had considerable experience in this type of health research, but we have a big task ahead of us in tooling up for safety research. In this area we plan to emphasize motivational and behavioral factors in safety, ergonomics, and work physiology.

We have been specifically directed, within two years, and annually thereafter, to conduct and publish industry-wide studies on the effect of chronic or low-level industrial exposures which may have potential for disease or functional impairment. The asbestos, beryllium, cotton dust, and noise studies we currently have underway are examples of the prescribed industry-wide studies. These environmental-medical studies will increase in variety, and many different types of records and studies will be added. We will be working for long-term effects, for exacerbation of the degenerative diseases of aging, and for shortening of the life span.

The requirement that we make hazard evaluations and toxicity determinations when requested in writing by any employer or group of employees could conceivably be overwhelming. At the other end of the action, the number of animal toxicity studies that can be carried out in-house or by contract is relatively small. For planning purposes, we are estimating there will be 5,000 requests per year. A one page form has been developed for these requests and will soon be available for general distribution. These requests will be received through the Regional Offices which will have access to a computerized technical information system. In this system will be stored trade name composition, toxicity data, sampling and analytical procedures, and suggested limits, if any. If the request concerns a substance for which there is already a standard, the request will be referred to the Department of Labor. Otherwise, a field visit by an industrial hygienist from the Regional Office is indicated. We anticipate that we will be able to make a final determination on half of the requests at the time of the first visit, especially if Material Safety Data Sheets are required to be kept or if the Toxic Substances Act is passed. We estimate a quarter of the requests will require field sampling on a subsequent visit, and several hundred per year will be almost complete unknowns which will require acute, sub-acute, and chronic toxicity studies. Medical studies may also be indicated. Because of the likelihood there will be more requests than can be answered with our resources, we may have to establish priorities based on severity of risk and number of people exposed ....

The compilation of an annual listing of toxic substances is also a difficult responsibility, especially this fiscal year when there was little lead time. We have, however, made progress in this area and expect to meet the deadline of June 29. The first list will identify each substance by generic name, will give the known toxic concentration which has most application to man under conditions of occupational exposure, and will contain literature citations. For many substances there will be no human data, and it will be necessary to supply animal data, but here again the closest approximation to the industrial route of exposure will be given. The definition for toxicity is broad and will include carcinogens, teratogens, and mutagens. We estimate there will be about 12,000 items on the first list. Compare this number with the 400-500 substances for which TLVs or standards are available. You might consider it our shopping list for standard setting. Later lists will be longer and will contain much more information.

Record keeping will be rquired by Department of Labor and, in some cases, by the Department of HEW. Wherever possible, the HEW record keeping requests will be made through the Department of Labor so as not to confuse or overwhelm industry. We have worked with DOL and ANSI in developing the present record keeping and reporting system. Occupational illnesses will be reported for the first time and will be broken down into several major categories.

I think our most important responsibility at this time is the development of educational programs to provide an adequate supply of qualified personnel to carry out the purposes of the Act. The trainees would be utilized by the Department of Labor, the Department of HEW, other Federal agencies, State health and labor departments, and by many industries and several labor unions. Our implementation of the manpower responsibility will include many different programs.

Through short-courses (1-20 weeks in duration) and associated extern programs in industry and State occupational safety and health agencies, we will train high school graduates to be technicians, junior college graduates to be para-professionals, and college graduates to be occupational safety and health professionals. Academic equivalency or commensurate achievement would be acceptable in lieu of graduate status. This type of retraining should be especially attractive to unemployed in the aerospace industry and to returning veterans.

We will increase the number of occupational safety and health professionals, para-professionals, and technicians over the long range through:

- 1. Associate degree program support -
- .2. Baccalaureate degree program support -
- Nursing school support for a last year option in occupational health nursing -
- 4. Masters level graduate training -
- 5. Research training grants.

And, lastly, before closing, I would like to say a few words about support given to our activities. Over the years we have been known as one of the rag-tag programs frequently reorganized and sometimes scheduled for extinction. Not so any more. Our appropriations have been steadily increasing since Fiscal Year 1969 when our budget was \$7.5 million; in FY 1970 it was increased by new responsibilities under the Coal Act to \$10.35 million; in Fiscal 1971 our base at the time the Job Safety Act was passed was \$13 million. Our plan for implementing the Act became one of the Health Options selected by Secretary Richardson and led to the President's Health Message to Congress on February 18, 1971. In that message, he requested a supplemental appropriation of \$5 million this year and an additional \$8 million in the 1972 budget to carry out HEW's responsibilities under the Act. In delivering his message, the President used the word "aggressive" to describe HEW's implementation activities. It may be too early to judge our performance because we are just getting organized, but this program has the support of both Secretary Richardson and Mr. Veneman, the Under Secretary, and I think you have every right to expect an aggressive implementation. In carrying out our implementation we will be seeking the advice and counsel of organized labor through the National Advisory Committee and through the Institute's advisory council.

In the long run, I think the health aspects of the new Act will overshadow the safety aspects and I think our responsibilities in HEW are much more difficult than DOL's responsibilities. The enforcement of

standards is relatively easy when the limit is given and the sampling method and analytical procedures are specified. The greater challenge and responsibility lie in trail blazing; that is ascertaining if there is a health hazard, program criteria or dose-effect type research to fill the missing gaps needed to set a standard and determining the limit which offers the greatest health protection.