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INSULATION HYGIENE PROGRESS REPORTS

FROM THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

Irving J. Selikoff, M.D., Program Director

Vol. 4, No. 4 Winter 1972

Convention Issue

Insulators' Health Problem Worst in U.S.

The health of insulation workmen was a major topic of discussion at the 22nd Convention of the International Association of Heat and Frost Insulators and Asbestos Workers in Las Vegas on September 11-14.

The first presentation of the results of the mortality study of the entire membership of the Union was made by Dr. Irving J. Selikoff. The results substantiated the earlier experiences of Locals 12 and 32 and demonstrated that serious health problems still exist in the insulation industry and that the problems are nation wide.

The accompanying article by Duncan A. Holaday provides some details of this presentation and points to several unfulfilled needs in the insulation industry.

Union Reaffirms Commitment

At the convention the officers and delegates of the Union reaffirmed their commitment to solving the health problems of the industry. General President Andrew Haas stated, "In view of the extreme importance and the health of our membership, not only now, but in the future, we cannot afford to drop our Health Hazard Program and we would be most negligent and remiss in our duties if we did not continue it. In fact we must intensify it until we have the industry cleaned up so that our members may work with the full knowledge that they are protected and safe from occupational disease."

In addition to presentations to the delegates by Dr. Selikoff, Dr. William J. Nicholson, and Duncan A. Holaday, a fourteen panel exhibit was installed describing the results of the IIHRP. Because of requests by many delegates that the material be more widely distributed, the exhibit is reproduced in its entirety in this issue.

A Gloomy Picture

by Duncan A. Holaday

Insulation workmen have been, and now are, subjected to extremely serious risks of disability and death from diseases related to their occupation. Mortality studies have shown incontrovertibly that past exposures of these men to toxic substances constitute what is probably the most serious occupational health problem we have in our country, both in degree and in numbers of people exposed.

Data were presented by Dr. Irving J. Selikoff at the 22nd Convention of the International Insulation and Asbestos Workers on the mortality experience of the entire membership of the Union from January 1, 1967 through December 31, 1971. Some of the significant findings are:

1. Of the 17,800 members of record on January 1, 1967, 1,092 died in the ensuing five years whereas only 806 were expected to have died. 286 excess deaths occurred.
2. 459 deaths from cancer occurred during this period although only 144 were anticipated. *Cancer was the cause of 41% of all deaths.*
3. In this same group 78 or 7.1% of the deaths were due to asbestosis—a disease which has no cause other than exposure to asbestos.
4. 77 or 7.0% of the men died from pleural and peritoneal mesotheliomas. As these diseases are extremely rare in the general population, essentially all of these deaths can be ascribed to exposure to insulation dusts.
5. 213—one of every five—deaths were due to lung cancer, an excess of 167 over the number expected.

These data demonstrate the results of the exposures to insulation dusts to which insulators have been subjected. The picture is indeed a grim one. If only the deaths from asbestosis, lung cancer and mesotheliomas are considered 29.6% of all deaths were caused by occupational disease. Moreover, as time progresses, it is anticipated that the percentage of excess deaths will increase.

It is pertinent to speculate on the public reaction which would occur if those working with nuclear energy suffered a comparable incidence of radiation-induced deaths. While industrial radiation exposure may arouse greater public interest than do other hazardous conditions, official agencies must regard all causes of occupational diseases with equal concern.

The NIOSH Criteria for a Recommended Standard for Exposure to Asbestos estimates that there are about 40,000 field insulation workmen in the United States and perhaps another 20,000 are employed in maintenance and repair in the chemical, refining, electric power and other industries.

These numbers may be compared with those engaged in coal mining (about 95,000) and metal mining (about 60,000). Thus we see that insulators are a significantly large group to be exposed to such high risks of injury and death.

Asbestos Standard a Beginning

Some first moves have been made by official agencies to improve conditions. A standard regulating exposures to asbestos was promulgated on June 7, 1972, containing provisions which theoretically should reduce exposures of insulators to asbestos dust.

This standard has several basic weaknesses which severely limit its effectiveness in reducing exposures in the construction industry. Almost all of the provisions of the standard require that OSHA must first prove that the stipulated atmospheric concentrations have been exceeded before dust control measures can be required. This means that first an inspection must be made and then there is a time lag of at least a week between the

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Editor: W. J. Nicholson, Ph.D.,

Published at the Environmental Sciences Laboratory (Irving J. Selikoff, M.D., Director), Mount Sinai School of Medicine of the City University of New York, New York, N.Y. 10029

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PURPOSES OF THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

1. To develop improved methods for minimizing exposure of insulation workers to dusts and fumes encountered in their work.

2. To disseminate knowledge of these improved methods of dust control wherever they may be applied advantageously and to offer cooperation, advice and assistance toward their universal adoption.

A Call For Action

(Continued from first page)

visit of an inspector and receipt of the laboratory report.

In the construction industry where conditions can change hourly, these procedures serve only to record exposures. OSHA has apparently recognized the futility of this mode of operation and is not even attempting to conduct industrial hygiene inspections of insulation work. With about 50 industrial hygienists to cover all industries it is understandable that OSHA has directed its efforts elsewhere. However, this does not alter the fact that the effect of official actions on reducing the hazards of insulators has been negligible.

Union and Company Action

Such improvements in environmental conditions which have taken place are largely the result of actions by the Union and individual companies. The Union, along with the Johns-Manville Corporation, through the Insulation Industry Hygiene Research Program, has sponsored projects which have identified the most hazardous operations; developed some dust control procedures; assisted in development of more useful respirators, and a manual of recommended practices for shipyard work.

The Union has also conducted a vigorous educational program in *Industrial Hygiene Progress Reports* and in seminars for its members. Contractors have started to use substitute materials (hopefully of lower toxicity than asbestos) and a few have acquired such dust control equipment as is available.

The situation is that we know we have serious health problems; we have identified the largest sources of hazards and have some means of correcting them; we have regulations, and we still have unsafe working conditions. Unless a positive program is developed and carried out, these unsafe conditions will continue to exist indefinitely.

Accept Responsibilities

Such a program cannot be conducted by the insulation industry and the Union alone.

Federal and State agencies must accept their responsibilities to assist the insulation workmen in alleviating all the adverse health consequences of insulation work. It is urgent that the appropriate government agencies consider implementation of the following programs:

1. Minimization of future insulation dust exposure, including development of the additional engineering control measures required.
2. Adequate compensation for dust related disabilities in all states including long term disability and family compensation.
3. Adequate medical surveillance of those workers exposed to insulation dusts. Lives can be saved in this way.
4. Adequate medical care, when required, of occupationally related disease.
5. Development of a cure for mesothelioma. This could be part of our country's new National Cancer Plan.
6. Development of methods to inactivate lung dusts in those workers already exposed. There is already evidence that this is possible.

In Memoriam

The Insulation Industry Hygiene Research Program wishes to gratefully acknowledge additional contributions made in memory of Albert E. Hutchinson. Previous contributions were listed in Volume 4, Number 3.

From locals of the International Association of Heat and Frost Insulators and Asbestos workers:

6	14	20
41	53	57
62	74	76
83	84	86
90	98	99

From labor organizations:

International Brotherhood of Painters and Allied Trades

State Building and Construction Trades Council of California

Norfolk Building Trades Council

Operative Plasterers' and Cement Masons'—International Association of the United States & Canada

Atomic Trades and Labor Council

From individuals:

Mr. Edward Sargawakian

Mr. Hoyt B. Gilley

Mrs. B. G. Scallon

Mr & Mrs. James Hauber

To date 92 groups and individuals have contributed over $5,900 to the Insulation Industry Hygiene Research Program in memory of Albert Hutchinson

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