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LABOR UNIONISTS

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ASBESTOS -- Death on Time-Payment

The diagram: The use of asbestos dates back over 100 years.

Prof. H.J. Woitowitz

ASBESTOS -- The Source of Malignant Tumors

The issue of safeguarding human health against hazardous materials and, in particular, against materials that cause cancer has now become a public issue with responsibility to be shared by the entire society. Reference is made here to one of the resource materials used in our time -- asbestos.

Asbestos is known as the "mineral of a thousand possibilities" or, "the magic mineral of the century".

In "The Limits of Growth" by the Club of Rome, asbestos takes 3rd place among hazardous materials known to cause danger, world-wide. The National Institute of Social Health (NIOSH) in the U.S.A. lists asbestos among the ten hazardous materials with the greatest potential for the development of cancer. The Senate Commission for the investigation of hazardous materials used by the research institutions in Germany has listed asbestos among the cancer-causing materials for about one decade.

ASBESTOS -- The Source of Illnesses

The use of asbestos in our country goes back 100 years. However, on the international scale it took decades before medicine was able to establish an actual relationship between the inhaling of asbestos and the resulting illness.

The first asbestos manufacturing company was established in Germany in 1870. The first medical reports describing the illnesses date back

to the year 1907 -- asbestosis; 1933 -- cancer of the lungs due to asbestos; 1938 -- pleural mesothelioma and in 1954 -- peritoneal mesothelioma. Today, these four illnesses resulting from the inhalation of asbestos, are covered by workmen's compensation.

Asbestos is mined, processed, used as an ingredient in a product or removed as waste. Many individuals come in contact with asbestos in the course of its production. Those engaged in the immediate processing of asbestos in the factory constitute only a fraction of the personnel involved in the total process and, thus, vulnerable to the dangers of asbestos dust.

Recent observations link illnesses from asbestos to the shape of the fibres. The fibres enter the vesicles of the lungs through inhalation of the so-called fine asbestos dust and are absorbed by the alveolar cells.

Depending on the length of the fibres, the cell membranes are punctured creating the so-called cuff-link phenomenon with resultant loss of fluid from the cells and the eventual death of the cell. Because some of the fibres remain in the lungs for a prolonged period of time, other generations of alveolar cells are doomed with a similar fate. This process is conclusive to the cause of asbestosis and the development of malignant tumors.

THE RISK OF TUMORS FROM ASBESTOS

Statistical data are available which give a break-down for specific tumors according to frequency and the locality of their occurrence. In groups exposed to asbestos dust the mortality rate from tumors is statistically more frequent.

According to the statistical study by the international institute for cancer research which was published in Lyon, in 1977 by WHO, workers in the U.S.A. exposed to asbestos dust show an increased frequency

in malignant tumors: the increase in the frequency of tumors due to asbestos, in one million workers who have been and continue to be exposed to asbestos dust in their line of work was estimated by breaking down the cause of deaths: from bronchial cancer approximately 15% from mesothelioma approximately 7 to 11 % that is a total of 22 to 26 percent deaths from tumors.

It should be noted that the percentage numbers estimated are correlative with the conditions as they existed a decade ago when facilities for the protection against the dust were more than inadequate. It is obvious, from scientific evidence submitted to-date that, there has been a change of opinion. It is agreed, that the risk for tumors to develop in workers exposed to asbestos dust is not only greater, as evidenced by a greater number of tumors but, that it even exceeds the level of risk to asbestos as applied by the standards of health. Thus, deaths due to malignant tumors were three times more frequent, than deaths due to asbestosis.

To this day, the Federal Republic has only limited, scientifically useful information available on research concerning types and the extent of risk for tumors due to asbestos. The exact number of tumors due to asbestos remains to this day in considerable obscurity for various reasons. Attempts at more research work for purposes of clarification, do not always meet with support from the responsible agencies.

LACK OF MEASURING VALUES

Attempts in the past as well as the present, to separate workers from areas endangered by asbestos dust, have proved to be impractical and difficult to carry out. One of the problems among the many others, is the lack of knowable criteria on which to base measured levels of asbestos dust in the that is inhaled by the workers.

As yet, no agreement has been reached or is even likely to be reached in the near future, on combining and comparing existing findings from available technological data on dust measurements with data from medical research on workers presently exposed to asbestos dust.

Furthermore, diagnostic clinics are needed for the examination of workers exposed to asbestos dust for at least a period of three years, for testing the obtained results so as to compare them with the internationally set health standards provided by the more recent and more advanced medical research on health in workers. This holds also true with regard to standards for workmen's compensation. Particular attention should be given the question concerning a more comprehensive coverage in instances involving bronchial cancer from asbestos as well as asbestosis.

Finally, the care and treatment of workers suffering from tumors due to asbestos should be a public concern and should be supported by the public.

Remarks:

- 1) Fibrosis of the lungs from asbestos, or asbestosis is diffuse scar tissue scattered throughout the lung, resulting from long-term inhalation of fine asbestos dust.
- 2) The lung cancer from asbestos shows no marked different characteristics than the bronchial cancer due to other causes. Bronchial cancer is a tumor with malignant cell growth, originating in the bronchial mucous membrane and continuing to spread and endangering life.
- 3) Mesothelioma is a malignant tumor with cell growth. It originates either in the pleural cavity or the peritoneum.

(Diagram on p.3: The primary danger -- the fine asbestos dust)