

KAESKE GYPSUM COMPANY, I. C.

11529

DEFDOC/
KAESKE

INTER-OFFICE MEMORANDUM

To	R.L. Allgood	W.L. Traub	DATE	March 1, 1965
	C.E. Caprye	J.H. Walton		
	J.D. Cassidy	R.J. Wiborn	FROM	L.R. Flicker
	J.D. Chambers	S.R. Witt	AT	KC 2482
	N.D. Dicks			
COPIES TO	D.H. Roman	cc: P.J. Franklin		
	J.F. Modaff	G.B. Kirk	SUBJECT	Health Hazards
	P.D. Crleman	J.C. Reilly		
		E.H. Schaper		

The attached material has been received from the Gypsum Association and is presented for your information.

In connection with protection against asbestos dust, it is advised to use a respirator with a filter especially designed for asbestos dust.

LRP:sb

KG-85

C
O
P
YC
O
P
Y

ASBESTOS IS POINTED OUT
AS CAUSE OF LUNG CANCER

by

Alton Blakeslee
AP Science Writer

NEW YORK (AP) -- Medical specialists pointed a strong finger of suspicion today at asbestos as a cause not only of lung cancer but also of another extremely rare form of fatal human cancer.

This cancer, known as mesothelioma, involves the lining of the abdominal and chest cavities.

Much of the specialists' evidence comes from autopsy studies of men working with asbestos as an insulation material.

They said it also is possible that dust from products containing asbestos might be exposing people generally to some risk of cancers. How much risk there might be, they said, they could not tell.

Release Dust

Asbestos is used not only for insulation but as a flooring material, in automobile brake shoes, and in many other applications. Ordinary wear and tear, they said, might release dust into the atmosphere.

The report was presented to the American Public Health Association by Drs. Irving J. Selikoff and Jacob Churg of the Mount Sinai Hospital, New York, and E. Cuyler Hammond, Sc.D., director of statistical research for the American Cancer Society. Dr. Hammond is known for his studies of cigarette smoking in relationship to lung cancer.

Asbestos is a mineral, magnesium silicate, and about 3 1/2 million tons of it are used worldwide each year, they said. In 1935, worldwide usage amounted to about 500 tons, the researchers said.

Tiny, hard particles of asbestos can lodge in the lungs during mining, processing and application of asbestos-containing materials, or possibly from dust raised through normal wear, they said.

"We had previously found that lung cancer and possibly gastrointestinal cancer were markedly increased in incidence among asbestos insulation workers," they said.

- 2 -

Increase Noted

Now they also find a markedly high increase among such workers of mesothelioma, a cancer so rare it is not classed separately as a cause of death in the international classification of diseases.

As a prime example, they reported finding 10 deaths due to this form of cancer in a study of 307 deaths among New York and New Jersey building trades union members engaged in using asbestos at least occasionally as an insulation material.

By contrast, this form of cancer was found to be the cause of death among only three out of more than 30,000 autopsies in a study of the general population sponsored by the American Cancer Society.

Other Studies

Other studies showed a high incidence not only of lung cancer but mesotheliomas among persons who had asbestos particles in their lungs at the time of their deaths, they said.

"It would appear that mesothelioma must be added to the neoplastic (cancer) risks of asbestos inhalation and joins lung cancer (53 out of 307 deaths) and probably cancer of the stomach and colon (34 of 307 deaths) as a significant complication of such industrial exposure in the United States," their report said.

The cancers may not appear until 20 to 30 years after asbestos dust is inhaled or swallowed, they said. Since the particles do not dissolve, they may remain in body tissue as a continuous source that might incite ultimate cancer.

Dr. Hammond said one worry is whether a few or even a single past exposure might set the stage for cancer. He said this is a matter calling for more research.

Taking precautions to avoid breathing in asbestos dust is a main protection for industrial workers, he and Dr. Selikoff said.



MOUNT SINAI SCHOOL OF MEDICINE
of The City University of New York
FIFTH AVENUE AND 100TH STREET • NEW YORK, N.Y. 10029



Department of Community Medicine



July 31, 1973

Mrs. Marie Ehrmann
Librarian-in-charge
Research Center Library
United States Gypsum Company
1000 East Northwest Highway
Des Plaines, Illinois 60018

Dear Mrs. Ehrmann:

There is a vast literature reporting results of investigations into the comparative toxicity of chrysotile asbestos, in relation to other fibers. In summary, no significant difference was found; all varieties show important fibrogenic and carcinogenic activity. At your request, we will provide some of the most pertinent references.

Insofar as human effects are concerned, it is conceivable that the animal models do not reflect a difference which might exist among the fiber varieties; this possible difference is the subject of investigation in a number of ways. Dr. McDonald considers that his studies in the chrysotile mines in Quebec have shown less lung cancer and mesothelioma than other asbestos-exposed groups. Very worrisome is his observation that more heavily exposed chrysotile miners had five times as much lung cancer as those more lightly exposed(1). This would provide clear evidence of the carcinogenic effect of chrysotile asbestos, since the individuals concerned had been exposed only to this fiber variety. Too, review of x-rays among these men has shown numerous cases of asbestosis, demonstrating the fibrogenic effect.

In addition to mine and mill employees, studies have also been undertaken of factory populations thought to be exposed only to chrysotile. This is more complicated, since it is difficult to be absolutely sure that the populations concerned never had any exposure, however small, to other fiber varieties. One such study was reported by Dr. Thomas Mancuso in 1963, and an important cancer risk of the population investigated was found(2). Another study has been reported at scientific meetings by Dr. Joseph K. Wagoner of the National Institute for Occupational Safety and Health. While this has not yet appeared in the scientific press, I am sure that you will be able to obtain a copy of the manuscript from Dr. Wagoner.

Mrs. Marie Chermann

-2-

7/31/73

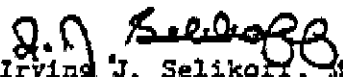
**PLAINTIFF
EXHIBIT
1626(2)**

Dr. Joseph Wagoner, Acting Director
Division of Field Studies & Clinical Investigation
National Institute for Occupational Safety and Health
550 Main Street
Federal Building, Room 7033
Cincinnati, Ohio 45202

In obtaining information on the question, advantage may be taken of another set of circumstances. Amosite and crocidolite, the other two major fibers used in commerce, are not mined in North America, and must be imported. Records of these imports have been kept by the Department of Commerce. We find that only trivial quantities of these fibers were imported until the 1940's and of these small amounts, crocidolite was not used in any insulation materials, although amosite was. Therefore, experience of asbestos insulation workers during the 1940's and 1950's (especially, the former) cannot be ascribed to other than the one asbestos fiber that was in regular use in insulation materials during the 1930's - chrysotile. Since lung cancer rates, as well as the occurrence of mesothelioma and deaths of asbestosis, were demonstrably increased among these men during the 1940's and 1950's, we may infer the chrysotile-associated risk among them(3-5).

Since the problem is an important one, I expect that more information will become available within the next several years.

Sincerely yours,


Irving J. Selikoff, M.D.
Professor

IJS:jlr

1. McDonald, J.C., McDonald, A.D., Gibbs, G.W., Siemiatycki, J. and Rossiter, C.E. Mortality in the chrysotile asbestos mines and mills of Quebec. Arch. Environ. Health. 22(6):677-686, June 1971.
2. Mancuso, T.F. and Coulter, E.J. Methodology in industrial health studies. The cohort approach, with special reference to an asbestos company. Arch. Environ. Health 3(2):210-226 (Feb.) 1963.
3. Selikoff, I.J., Churg, J. and Hammond, E.C. Asbestos Exposure and Neoplasia. J.A.M.A. 188:22-26, 1964.
4. Selikoff, I.J., Churg, J. and Hammond, E.C. The occurrence of asbestosis among insulation workers in the United States. Annals. N.Y. Acad. Scs. 134(1):139-155, Dec. 31, 1965.
5. Selikoff, I.J., Hammond, E.C. and Churg, J. Asbestos exposure, smoking and neoplasia. J.A.M.A. 204(2):106-112, April 1968