

72/2591-2

QUESTION AND ANSWER SESSION
FOLLOWING DR. SELIKOFF'S PRESENTATION

PLAINTIFFS
EXHIBIT
IN-26

- Q. In the asbestos products factory in which men employed for only three months were found to have a significant increase in lung cancer, were smoking histories obtained?

(Dr. Selikoff)

- A. The answer is "Yes", and those data are now being analyzed, but I would be amazed if we found any lung cancers or any more than a trivial number among those who did not smoke cigarettes. We have failed to see any significant increase in the incidence of lung cancer among asbestos workers who do not smoke cigarettes. We have been following 2,066 non-smoking insulation workers from January 1967 through 1971 and we have only seen two lung cancers among them. On the other hand, of 9,590 cigarette smoking insulation workers, we have found 145 lung cancers whereas only some 30 were expected. Bronchogenic carcinoma is almost limited to cigarette smoking asbestos workers. This is not true of peritoneal mesothelioma; it is not true of asbestosis; and it is probably, although our data is too scant yet to be sure, it is probably not true of pleural mesothelioma. But of lung cancer - there is no question - this will not occur by and large among asbestos workers who do not smoke cigarettes.

I would like to ask Dr. Selikoff if he thinks the new standard should include both a total dust count - if there is a new standard - both a total dust count and a per cent fiber count. At least in our experience, we seem to vary comparatively. A standard set on one rather than the other could be quite misleading.

Ray Murphy has asked me a very embarrassing question. He asked me to give an opinion where I can't give it even on fiber counts. He now asked me whether I would do it on total counts rather than just fibers. The answer is, "I don't know." But I'm not very impressed (if I can upstage Duncan Holiday a bit who is going to review this tomorrow morning) - we're not very impressed with asbestos standards which rely upon dust counts being done. May I give you some data? Very depressing data, if you think these are depressing. On June 7, 1972, the asbestos standard came into effect. And it said that every company using asbestos had to do at least one dust count, one dust count, in the next six months. That is, by December 6. We, on December 7, did a survey of insulation workers in the United States and we now have some 5,000 odd replies. Each man was asked about

the dust counts that he personally had seen in the six months when every company was supposed to do a dust count. In the United States insulation industry, fewer than 3% of the insulation workers saw even one dust count done from June 7 to December 6, 1972. Obviously then, dependence upon dust counting as a means of control in this unusual industry has many deficiencies.

- Q. It is really one question in two parts, perhaps. The fibers at the Turner Asbestos Company (Knox-Holmes study), what were these and could you comment, would you comment on the possible differences that you think may be between crocidolite and chrysotile and amosite?
- A. The fibers in Turner Brothers, since it was a textile operation, were largely chrysotile. We can give you no information concerning crocidolite because none of the workers studied by us had any crocidolite exposure. They had chrysotile exposure and many of them had amosite exposure. Indeed, in the plants, in the factory making the Navy insulation, this was almost entirely amosite. So our data apply only to amosite and to chrysotile and, unfortunately, I can give you no information on the relative hazard of crocidolite. I would suggest, however, that if crocidolite is more dangerous than amosite or chrysotile, it is going to be almost as bad as bis-chloromethylether. (Laughter)
- Q. Dr. Selikoff, are you aware of a particular type of asbestos fiber mined in Ontario called Headman? fibers which have been found to be relatively inert, by Paul Gross and others?
- A. I presume that you mean the fibers mined in Quebec, not Ontario. (No, mined in Headman Mine in Ontario.) No, I do not know these particular fibers and I would be delighted to know of an asbestos fiber which is comparatively inert.
- Q. They claim - and Paul Gross and others have done experimental work - and they have found that this particular fiber which is chrysotile has been, in experimental work, found to be inert.
- A. Well, I would be delighted to see those, indeed I'd be delighted to see those in industrial use.

Thank you, Dr. Selikoff.