

COPY

COMMENTS

1. Tissue and animal susceptibility was noted in the experiments. Individual susceptibility to the dust among our employees has been noted for many years.
2. We always have believed that the action of the dust was mechanical and not chemical. If there was an added chemical effect, I believe that we would see countless cases of asbestosis because we have had hundreds of men exposed to high concentrations of dust.
3. The theory of the action only by long fibres of 20-50 microns is, at first, hard to accept because:
 - (a) I personally have heard the late Dr. Gardner say that probably the most dangerous lengths of fibre for the production of asbestosis are those of 5 to 15 microns in length.
 - (b) In Dr. Gardner's letter to Mr. Sabourin of Feb. 23, 1944, he states: "I believe that the true hazard in asbestos plants is proportional to the amount of small, individual uncrushed fibres in the atmosphere. ~~I suspect that the~~ reason only one sees little or no typical asbestosis in the mines and mills is because there is probably too little such fibre in the air of these plants. Conversely the reason for the typical disease in the fabricating plants is the fact that the processes there open the bundles of asbestos fibres and tear them into lengths short enough to be inhaled in dangerous quantities".
 - (c) In the U.S. Public Health Bulletin #241 entitled "A Study of Asbestosis in the Asbestos Textile Industry" it is stated that the medium length of fibres range from 7 to 16 microns in the plants studied. Dust counts around the mixing pickers and cards showed the lowest percentage of fibre and the shortest lengths of fibre and it was among these men (pickers and carders) that the greatest number of asbestosis cases occurred.

However, in spite of these three statements, I would prefer to believe in the action only of the long fibres and accept these recent Saranac findings because:

- I - The dust counts in our mills show 65% - 80% of the fibres are 5 microns or less in length and rarely 1% are 20 microns or longer, and we have relatively few asbestosis cases.
- II - The recent Saranac studies have shown that asbestosis will develop in an atmosphere of 138 M.P.C.F. total count of which only 0.6% were fibres longer than 10 microns. We have had many areas in our mills where such counts could have been found.