

1 fiber/ml (1,000,000 fibers/m³) was found. Much larger numbers of shorter fibers would simultaneously be inhaled. During the beveling of truck brake shoes on a grinding machine, very high concentrations of fibers were found in the vicinity of the operator. The average of five air samples was about 37 fibers/ml. Area samples, taken up to 30 feet away from this operation, demonstrated the presence of airborne fibers. It was of interest to note that, at the time of this sampling, from 8-15 other garage mechanics were working within this perimeter and were exposed to asbestos. Fiber levels for other kinds of operations at the truck garage are given in Table IV.

Don't know if this is grinding?

Boillat and Lob (1973) have reported fiber concentrations measured during punching holes for rivets and grinding. They found values ranging from 0.3 to 29.2 fibers/ml; four of the nine values exceeded 5 fibers/ml.

A comparison of fiber levels visible by light microscopy and electron microscopy

In the ten brake drum dust samples examined, it was found that asbestos fibers shorter than 0.4 μ m predominated (Table II). The OSHA Asbestos Standard does not require that short fibers (< 5 μ m in length) be counted or controlled. This oversight may have considerable biological significance in that small chrysotile fibers readily produce asbestos disease (Bolt, Mills, and Young, 1964, 1965; Davis, 1965; Pott, Buth, and Friedrichs, 1972; Wagner, Berry and Timbrell, 1973; Hilscher et al., 1970). Attention has recently been again called to the potential importance of this question (Bouhuys, 1975).

There is little published information on the numbers of, and sizes of, submicroscopic asbestos fibers in occupational exposures. The present

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