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Letter to the Editor

Prevalence of Radiographic Small Opacities in Vermiculite Miners

In a recent paper on the radiological findings of vermiculite miners exposed to tremolite fibers [Amandus et al, 1987], the relationship between the prevalence of radiographic small opacities and cumulative fiber exposure was described for vermiculite miners and workers in other studies. As part of this comparison, reference was made to the study of Louisiana asbestos cement workers [Jones et al, 1980]. Because Jones et al estimated progression of radiographic small opacities, a better reference would have been to the prevalence of small opacities in these workers [Weill et al, 1973]. Weill et al reported that the prevalence of small opacities (rounded or irregular) was 1, 1, 2, 8, 14, and 23% for $\leqslant$250, 251-500, 501-1,000, 1,001-2,000, 2,001-4,000, and $\geqslant$4,001 million particles per cubic foot-months. When comparing Weill et al's results to those from our study, the slope of the exposure-response relationship for vermiculite miners was much higher than that for asbestos cement workers (Fig. 1). The risk of radiographic small opacities is higher for tremolite-actinolite fibers which contaminate the Libby ore than for chrysotile fibers in the asbestos cement studied by Weill et al.

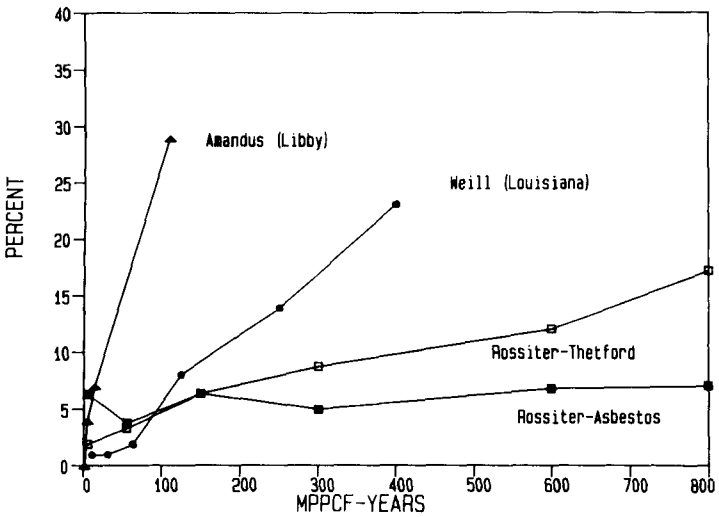

Fig. 1. Prevalence of radiographic opacities by cumulative exposure (MPPCF-years) from asbestos studies.

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