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Evaluation of Two Cleaning Methods for the Removal of Asbestos Fibers from Carpet

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The effectiveness of dry vacuuming and wet cleaning for the removal of asbestos fibers from carpet, as well as the potential for airborne asbestos fiber reentrainment during carpet cleaning activities, was evaluated. Routine carpet cleaning operations were simulated using high-efficiency particulate air (HEPA) filtered dry vacuum cleaners and HEPA-filtered hot water extraction cleaners on carpet artificially contaminated with asbestos fibers. Overall, wet cleaning with a hot water extraction cleaner reduced the level of asbestos contamination in the carpet by approximately 70%. There was no significant evidence of either an increase or a decrease in the carpet asbestos concentration after dry vacuuming. Airborne asbestos concentrations were between two and four times greater during than before the carpet cleaning activities. A reduction in the amount of asbestos in the carpet would suggest a possible reduction in the potential exposure to building occupants.
