



Wrong: Sawing asbestos materials creates dust in the work environment. The respirator affords the employee some protection, but the accumulation of dust remains a threat to others on the work site.



Right: A saw with a local ventilation system sucks up asbestos dust into a container. The OSHA standard specifies that hand or power-operated tools that produce asbestos dust must be equipped with local exhaust ventilation and dust collectors.

exposures, however, are relatively light. In most types of insulation, asbestos is used primarily as a binding agent and makes up only 25 percent of the material. Then, too, insulators working with asbestos on a daily basis are encouraged to take precautions: good housekeeping measures, tools equipped with local ventilation systems, and respirators for dusty work are safety precautions stressed by their union.

When insulation workers install materials containing a high percentage of asbestos, they often use a water spray on the cloth while unrolling it or uncovering it. Some insulation workers even cut asbestos on disposable tarpaulins in order to allow the excess material to be discarded without stirring up dust. This eliminates the need to sweep up insulation debris after a job. Usually a dusty process, sweeping is discouraged because it holds a risk for the workers still on the construction site.

Bricklayers, carpenters, sheet metal workers and boiler makers also install insulation at various times, but often they fail to take the precautions used by workers who handle asbestos on a daily basis. The licensing of workers who install insulation, much like the licensing of plumbers and electricians, has been suggested as a safeguard to insure that asbestos handlers are both informed and equipped to work safely.

Asbestos contamination holds an increasing threat to the general public. Both the dusty manufacturing processes and the spraying of structural steel emit vast amounts of asbestos fibers into the atmosphere, threatening those living near asbestos factories. Unsuspecting passers-by in the vicinity of construction sites or families of workers who return home with dusty clothing are among those exposed to this hazard.

The emergency OSHA standard for asbestos issued on December 7, 1971, lowers the permissible concentration of asbestos fibers in the work atmosphere from 12 fibers to five fibers greater than five microns in length per milliliter. This is based on the average exposure during the eight-hour work day. Concentrations of asbestos that range from five fibers per milliliter to 10 are permissible for 15 minutes every hour, but the sum total of such exposure must not exceed five hours in an eight-hour work day.

The standard also lists engineering controls—enclosures, vacuum sweeping and local exhaust ventilation. When these measures are not feasible or do not reduce the asbestos concentration to permissible levels, the standard requires that workers be provided with personal protective devices. Protective respiratory devices must be worn by workers exposed to the spraying of asbestos, or