



## How to Protect Yourself from Asbestos Hazards

Cleaning up after a flood requires hundreds of workers to renovate and repair, or tear down and dispose of, damaged or destroyed structures and materials. However, repair, renovation, and demolition operations often generate airborne **asbestos**, a mineral fiber that can cause chronic lung disease or cancer. The Occupational Safety and Health Administration (OSHA) has developed regulations designed to protect cleanup workers from asbestos hazards.

### How You Can Become Exposed to Asbestos

Before it was known that inhalation of asbestos fibers causes several deadly diseases—including asbestosis, a progressive and often fatal lung disease, and lung and other cancers—asbestos was used in a large number of building materials and other products because of its strength, flame resistance, and insulating properties. Asbestos was used in asbestos-cement pipe and sheeting, floor and roofing felts, dry wall, floor tiles, spray-on ceiling coatings, and packing materials.

When buildings containing these materials are renovated or torn down, or when the asbestos-containing materials themselves are disturbed, minute asbestos fibers may be released into the air. The fibers are so small that they often cannot be seen with the naked eye; the fact that you can inhale these fibers without knowing it makes asbestos an even more dangerous hazard.

### OSHA's Standards for Asbestos

The work of flood cleanup personnel involves the repair, renovation, removal, demolition, or salvage of flood-damaged structures and materials. Such materials may contain or be covered with asbestos, and cleanup personnel are protected by OSHA's construction industry asbestos standard (*Title 29 Code of Federal Regulations (CFR)*, Part 1926.1101). This standard requires employers to follow various procedures to protect their

employees from inhaling asbestos fibers. The standard contains many requirements that vary depending on the kind of work being undertaken, the amount of asbestos in the air, and other factors. You and your employer can obtain a copy of this standard and the booklet, *Asbestos Standards for Construction* (OSHA 3096) describing how to comply with it, from OSHA Publications, P.O. Box 37535, Washington, DC 20013-7535, (202) 693-1888(phone), or (202) 693-2498(fax); or visit OSHA's website at [www.osha.gov](http://www.osha.gov).

### Major Elements of OSHA's Asbestos Standard

The following include some of the major requirements of the asbestos standard. For complete information on all requirements, see 29 *CFR* 1926.1101.

- A permissible exposure limit (PEL) of 0.1 fiber of asbestos per cubic centimeter of air as averaged over an 8-hour period, with an excursion limit of 1.0 asbestos fibers per cubic centimeter over a 30-minute period.
- Requirements for an initial exposure assessment to ascertain expected exposures during that work operation, and periodic exposure monitoring in certain instances.
- Use of engineering controls, to the extent feasible, to meet the PEL. Where this is not possible, engineering controls must be used to reduce exposures to the lowest levels possible and then supplemented by the use of appropriate respiratory protection.
- Use of regulated areas to limit access to locations where asbestos concentrations may be dangerously high.
- No smoking, eating, or drinking in asbestos-regulated areas.
- Requirements for warning signs and caution labels to identify and communicate the presence of hazards and hazardous materials; recordkeeping; and medical surveillance.