

Personal Protective Equipment for Post-Fire Operations

Hundreds of thousands of acres have been affected by the fires in Southern California. Over the next several weeks, many people will be working on those sites in post-fire cleanup and recovery operations. County or state agencies may designate some locations as hazardous waste sites, in which case Cal/OSHA requires additional specific personal protective equipment and procedures, beyond what are listed below.

Each site should be surveyed for health and safety hazards. Particular care should be taken in situations where gases and vapors may form pockets, such as the basements of destroyed houses. Fire gases may be slow to dissipate from those areas. As time progresses the decay of vegetation may create pockets of flammable gases or areas where there is not sufficient oxygen. These situations require special precautions, and are not covered by the list below. The list below also does not cover active fire-fighting operations, since those require a higher level of personal protective equipment.

Hardhat

A hardhat can protect you against a head injury from falling debris. It is important that the suspension of the hardhat be adjusted so that the band fits snugly against your head. Look for hardhats that meet the requirements of the American National Standards Institute (ANSI) Z89.1.

Eye Protection

Use safety glasses or goggles, particularly when working with power or impact tools. Eye injuries are a common problem for recovery workers. Goggles may reduce eye irritation from smoke, although it is probably better to use a full-facepiece respirator [link to respirator piece] in those situations. There were over 1000 eye injuries in the first 10 weeks of work on the World Trade Center site in New York City. Look for eye protection that meets ANSI Z87.1.

Respirators

If there is visible smoke near the ground, or if you are experiencing respiratory irritation, you should be using a respirator. The most effective respirators are Self-Contained Breathing Apparatus, like those used by firefighters, however, those are difficult to work in for extended periods of time. At a minimum, people who will be on site should use an air-purifying respirator. Respirators used by employees must be approved by the National Institute for Occupational Safety and Health (NIOSH). [More information on respirators - insert link]

Hearing Protection

If you are exposed to excessive noise, such as might come from working close to heavy equipment, your employer is required to provide hearing protection, such as earplugs or earmuffs. This equipment will be rated by NRR (Noise Reduction Rating).

Gloves

All workers who will be around debris from the fire should be provided with a good pair of well-fitting work gloves. Gloves that are too thick, or that don't fit right, may limit your dexterity. Gloves made of leather, kevlar, or canvas, that extend above the wrist, will help to prevent cuts and other injuries. However, if there are chemical or biological hazards, special gloves will need to be used.

Clothing

Special protective clothing is required for workers who may be exposed to significant amounts of hazardous materials. At a minimum, you should wear a long-sleeved workshirt and long pants to protect yourself against injury from abrasive materials on the site.

Foot Protection

The large amount of debris on fire sites, and the recovery activities, can cause foot injuries both from materials falling on the foot, and from materials in debris piles puncturing the sole of the shoe. Therefore, your footwear should provide both toe and sole protection. Boots may also be necessary because the sites may be wet. Whatever foot protection you use should have good traction, because these sites can be very slippery. Foot protection should be labelled as meeting ANSI Z41.

Fall Protection

When employees are working at heights, and are not protected by walls or guardrails, they are required to use fall protection. If you are assigned to that type of work, your employer must have fall protection procedures, and provide training and equipment such as a lanyard and harness, as well as determine a safe point of anchorage.

Avoid Take-Home Hazards

Some of the fire debris may contain asbestos, lead or other hazardous chemicals. You can limit your exposure, and the exposure of your family, by wearing coveralls, gloves and rubber overboots on the job, and cleaning or leaving them at the site.