

# Safe Cleanup of Fire Ash

Photo courtesy: CDC/Dr. Edwin P. Ewing, Jr.

There are potential dangers involved with cleanup operations following the devastation caused by wildfires.

If you are involved in cleanup efforts you may be exposed to ash, soot and fire decomposition products that may cause irritation and other respiratory effects. Any ash will contain small amounts of cancer-causing chemicals.

## Ash from Forest Fire

- Relatively non-toxic, similar to ash that might be found in fireplace
- May be irritating to the skin, nose, throat
- May trigger asthma attacks in people who already have asthma

## Ash from Inside Burned Structure

- Ash and debris may contain more toxic substances because of the many synthetic and other materials present in buildings
- More cautious approach should be taken

A high efficiency particulate air (HEPA)-type vacuum is recommended when cleaning surfaces contaminated with dust.

A typical household vacuum should be avoided. It will re-circulate the collected dust back into the air.

## Working Near Power Lines

Workers must take extreme caution while attempting to restore power or clear areas near downed power lines. Electrical or traumatic injuries could happen as power lines are reenergized and equipment is turned on.

Be aware of possible fire damage to poles and other structures carrying overhead power lines.

## Potential Dangers During Cleanup

- Fire
- Electrical hazards
  - Electric shock
  - Burns
  - Falls
  - Electrocutation
- Carbon monoxide
- Musculoskeletal hazards
- Heavy equipment
- Thermal stresses
- Unstable structures
- Hazardous materials
- Confined spaces

## STRESS AND FATIGUE

Continued long hours of work, stress, and fatigue may increase the risk of injury and illness. These combined with emotional and physical exhaustion can create a highly stressful situation for cleanup workers.

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## Reduce Your Risk!

- First aid
  - Immediately clean all open wounds and cuts with soap and water
  - For major cuts, seek medical treatment
- Protective equipment
  - Hard hats
  - Safety goggles
  - Heavy work gloves
  - Ear plugs
  - Watertight boots with steel toes

### \*Fire Extinguishers

**UL** stands for Underwriters Laboratories, Inc.

The **UL rating** is broken down into Class A and Class B:C ratings.

The **A** rating is a water equivalency rating. Each A is equivalent to 1.25 gallons of water.

Using one **10A** fire extinguisher would contain 12.5 gallons of water to put out ordinary combustibles, such as wood and paper.

People working in all phases of cleanup work can reduce their risks of injury and illness in several ways.

Cleanup crews must work together and look out for one another to ensure safety.

- Set priorities for cleanup tasks and pace the work over several days (or weeks).
- Take frequent rest breaks BEFORE exhaustion builds up. Avoid physical exhaustion.
- Resume a normal sleep schedule as quickly as possible.
- Be alert to emotional exhaustion or strain.

## Safety First!

### Fire

At least two fire extinguishers\*, each with a UL rating of at least 10A, should be provided at every cleanup activity.

### Musculoskeletal Hazards

Use teams of two or more to move bulky objects.

Avoid lifting any material that weighs more than 50 pounds (per person). Use proper automated-assist lifting devices.

### Unstable Structures

Assume all stairs, sidewalks, parking lots, roads, and roofs are unsafe. These may have structural damage and can be dangerous.

### Electrical Hazards

Only trained professionals, such as electricians and utility provider workers, should deal with electrical problems.

### Heavy Equipment

Only those properly trained should operate heavy equipment.

Make sure you turn it off and block it against motion when not in use.

### Hazardous Materials

Do not attempt to move unidentified dislodged containers without first contacting the local fire department or hazardous materials team.

### Carbon Monoxide

Never use gasoline- or diesel-powered pumps, generators, and pressure washers indoors.

These machines give off carbon monoxide (a deadly, colorless, odorless gas).

### Thermal Stress

Reduce the potential for heat stress.

- Drink a glass of fluid every 15 to 20 minutes
- Wear light-colored, loose-fitting clothing
- Divide workload evenly throughout the day

### Confined Spaces

Never enter a confined space unless you have been properly trained, even to rescue a fellow worker.