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National Institute of  
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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
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# Protecting Yourself While Removing Post-Disaster Debris from Your Home or Business



**FEMA**

[www.fema.gov](http://www.fema.gov)



[www.ema.alabama.gov](http://www.ema.alabama.gov)

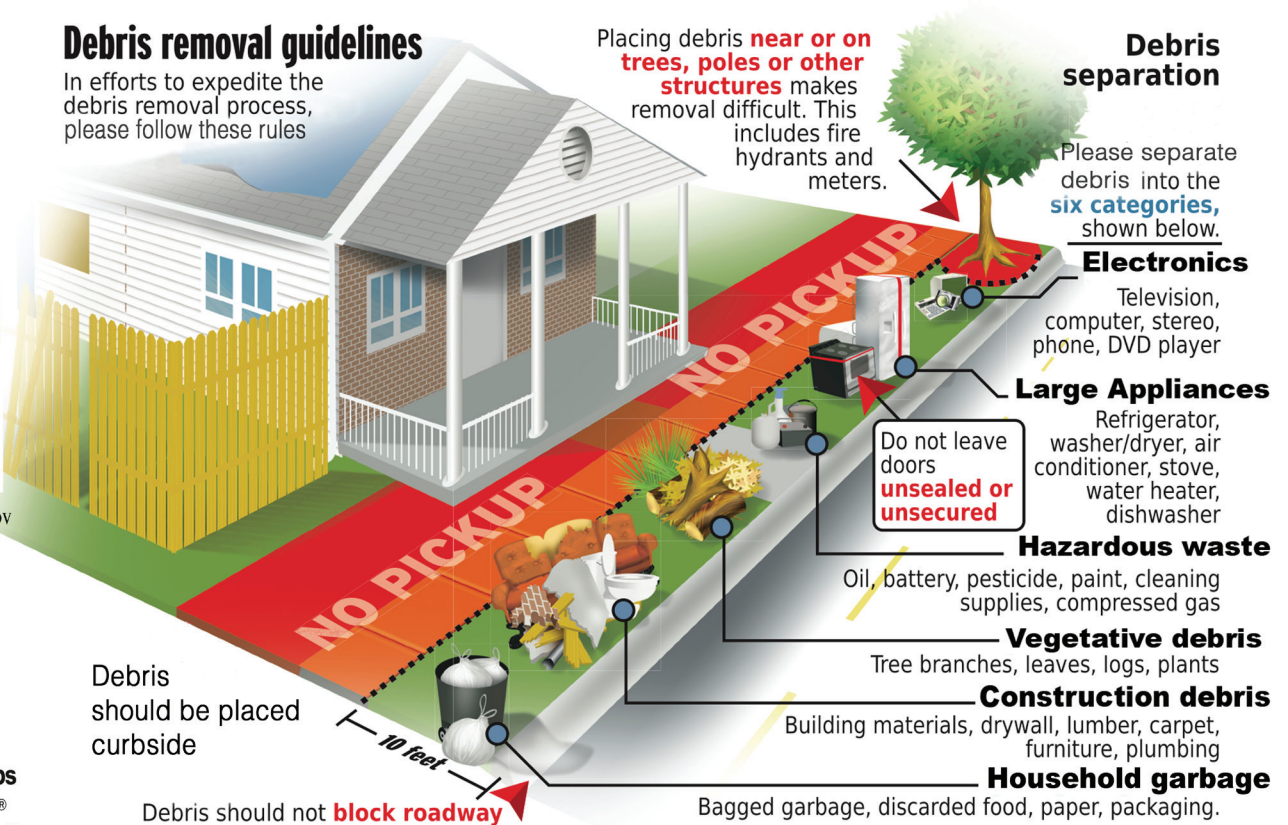


**US Army Corps  
of Engineers®**

[www.usace.army.mil](http://www.usace.army.mil)

## Debris removal guidelines

In efforts to expedite the debris removal process, please follow these rules



# Protecting Yourself While Removing Post-Disaster Debris from Your Home or Business

*This factsheet is for small business owners, residents and community/faith based volunteer groups conducting post disaster cleanup activities. The purpose of this fact sheet is to provide awareness level information on post-disaster hazards. Stay away from any hazards created by the disaster. Only authorized, licensed professionals should deal with these hazards.*

*This factsheet outlines the main hazards associated with post-disaster cleanup and provides common control methods. When in doubt, see a disaster site safety officer.*

**Do not let children participate in post disaster cleanup!**

## HEALTH AND SAFETY HAZARDS

**If you have any of the following, seek assistance from a qualified local government authority.**

- Damaged structures
- Damaged utilities/downed power lines
- Debris/ debris piles
- Standing water, cracks in ground, recent fire
- Chemical containers (household or other)
- Asbestos if your house was built during or before 1979
- Lead if your house was built during or before 1978
- PCBs if your house was build during or before 1977
- Mold if your home was affected by water
- Silica from construction materials/soil
- Use of powered equipment or hand tools
- Use or work around heavy equipment
- You have to work at heights
- Working in hot or cold environments

### Who to contact when you have concerns

#### Occupational Safety and Health Administration (OSHA)

Ph. 800-321-OSHA (6742); [www.osha.gov](http://www.osha.gov)

OSHA sets and enforces workplace health and safety laws. Most workers in the nation come under OSHA's jurisdiction. OSHA covers private sector employers and employees in all 50 states, the District of Columbia, and other U.S. jurisdictions either directly through Federal OSHA or through an OSHA-approved state program.

#### Federal Emergency Management Agency (FEMA)

Ph. 800-621-FEMA (3362); [www.fema.gov](http://www.fema.gov)

FEMA's mission is to support citizens and responders during disasters. Contact them if you have questions about debris cleanup procedures or disaster assistance and recovery procedures.

### Your local emergency services

Call 911 to contact your local emergency services (including fire and police services) if you are concerned about hazardous situations that could be immediately hazardous to life including damaged utilities, unstable structures, unsecured hazardous chemicals (damaged containers, strange odors, etc.), discovery of trapped person, etc.

**Your first concern is life safety!**

**Protect yourself and family first, before protection of property. Do not attempt actions which may put you in danger, such as entering an unstable building to search for valuables or crossing flood waters. Contact local emergency services and evacuate to a safe location until hazard is removed by authorized/trained professional.**

# COMMON POST-DISASTER HAZARDS AND THEIR CONTROLS

## Unstable/Dangerous Walking and Work Surfaces

- Debris piles, standing water, cracks/voids in ground, recent fire
- Assess the area and choose the safest path
- Walk and work on surfaces you know are stable
- Look for smoldering material on/beneath surfaces
- Wear protective equipment including hard hats, safety glasses, leather gloves and safety shoes with slip resistant soles
- Watch for fall hazards to other levels
- Watch for entrapment hazards

## Unstable Structures and Confined Spaces

Disasters can rearrange and damage structures

- Never assume that damaged structures or ground are stable-have it certified safe by a registered professional engineer or architect
- Assume all stairs, floors and roofs are unsafe until inspected
- Unstable ground or flooring could give way
- Watch for leaning structures and trees and avoid them
- Entering confined spaces could kill you! Only trained and authorized personnel should enter confined spaces
- If you find a trapped person, call 911 IMMEDIATELY and do not attempt rescue as you could become the victim

***Leave immediately if you hear shifting or unusual noises - A COLLAPSE MAY BE OCCURRING***

## Pressure Washers

Hazards include chemical and thermal burns, lacerations, CO production, projectiles and electric shock. Safe use guidelines include:

- Follow manufacturers safe use recommendations
- Inspection of washer
- Training and proper use
- PPE (including insulating rubber boots)
- Understanding chemicals used with the washer
- Use with Ground Fault Circuit Interrupters (GFCI) and proper electrical safety

## Debris Removal

- Wear safety shoes with non-skid soles, safety glasses, leather work gloves, hard hat, long pants and shirt.
- Do not handle broken chemical containers
- Do not remove debris that may destabilize piles or structures
- Do not lift too much, call for heavy equipment
- Segregate debris according to FEMA or Local/State requirements

## Damaged Utilities

Utilities can cause electric shock, poisoning, explosions, fires, burns and death

- Call 911 if you suspect damaged utilities, do not enter area
- Fuel leaks will have a distinct odor (gasoline, oil, rotten eggs)
- Electrical contact can cause falls
- Stay away from downed power lines. Report downed lines and assume they are live

## Harmful Dusts

Dusts created by a disaster or during cleanup may have asbestos, heavy metals, silica or other toxic materials. Try not to disturb dust. Protect yourself in dusty environments. **If in doubt ask your local government authority.**

**If you must disturb dust use:**

- Water to mist material and keep it wet
- High Efficiency Particulate Air (HEPA) vacuum

**Do not use:**

- Common shopvac that does not have a HEPA filter
- Do not dry sweep

Avoid walking or working in dusty areas as you may inhale harmful dust and/or become contaminated with dust

Respirator use may be required. Respirator use requires training. Respirators must be fit tested and you may need medical clearance to wear certain respirators (business use only). An N-95 or greater respirator is acceptable for most activities. Use an elastomeric, half-mask respirator with N,R, or P-100 series filters if asbestos, ash or fire retardants may be present. For residence and volunteers seek guidance from your local government authority.

**Surgical masks should not be used because they do not provide adequate protection.**

## Hazardous Chemicals

Household and industrial (small business use or displaced from other property) chemicals

- Do not handle any containers that are damaged/leaking
- Do not handle any chemical containers if you are unsure of its contents
- Do not handle any industrial chemical containers
- Use gloves and safety glasses when handling household hazardous chemicals
- Do not mix chemicals
- Do not place chemicals near open flames/hot surfaces (running motor)

***Procedure for communicating hazardous materials are present: Yellow Tag***

## Portable Generators

Hazards include CO poisoning and electrocution.

- Follow manufacturer's recommendations and specifications and grounding instructions
- Use a qualified electrician to assist in installation and start-up activities
- If using gasoline- and diesel-powered portable generators, switch the main breaker or fuse on the service panel to the "off" position before starting the generator
- Do not on or in wet surfaces
- Do not operate in rain unless the generator can be kept dry
- When refueling, turn off and wait for motor to cool or use appropriate funnel to prevent spills onto hot engine

## Chainsaw Use

Operate, adjust, and maintain the saw according to manufacturer's instructions.

- Properly sharpen chain saw chains and properly lubricate the bar and chain with bar and chain oil
- Periodically check and adjust the tension of the chain saw blade to ensure good cutting action.
- Use proper size of chain saw to match the job
- Include safety features such as a chain brake, front and rear hand guards, stop switch, chain catcher and a spark arrester
- Wear the appropriate protective equipment:
  - Hard hat
  - Safety glasses/face shield
  - Hearing protection
  - Heavy work gloves
  - Cut-resistant legwear (chain saw chaps)
- Always cut at waist level or below
- Avoid contact with utilities or ground
- Bystanders or coworkers should remain at least:
  - 2 tree lengths (at least 150 feet) away from anyone felling a tree
  - 30 feet from anyone operating a chain saw to remove limbs or cut a fallen tree

## Traumatic Stress

A traumatic event is a shocking and emotionally overwhelming situation in which an individual perceives actual or threatened death or serious injury. Those affected by a disaster may experience traumatic stress.

Responses will vary from person to person. It is very common for people to experience anxiety, terror, shock, and upset, as well as emotional numbness and personal or social disconnection. **Individuals with prolonged traumatic stress (anxiety, depression, etc.) that disrupts their daily functioning should consult with a trained and experienced mental health professional.**

## Carbon Monoxide (CO)

Carbon Monoxide has no warning properties; it is a colorless odorless gas that can kill you!

Symptoms: Headache, dizziness, drowsiness, or nausea progressing to vomiting, loss of consciousness. Prolonged or high exposure can lead to coma or death.

Areas that have a high risk for CO exposure include:

- Any activity using gasoline, diesel or propane-powered equipment
- Work near gasoline, diesel or propane equipment
- Debris reduction sites (burning)
- Activity near hot work (cutting, welding) especially in confined spaces and smoldering debris

## Hand and Portable Power Tools

- Inspect tools in accordance with manufacturer's specifications
- Take damaged tools out of service and use only sharp tools and blades
- Do not work with electricity in wet environments
- Electrical cords/outlets must meet OSHA standards
- Use GFCIs on all power tools and cords as close to the panel as possible
- Use with proper gauge electric cord
- Use double insulated tools
- Do not re-energize electrical systems or use electrical equipment that has been in a fire or wet until it has been evaluated by a qualified electrician
- Always wear eye protection when using tools

## Other Post-Disaster Cleanup Hazards

- Heat and cold stress
- Sunburns
- Injuries to your body from lifting and strain
- Animals, insects and harmful plants
- Infection from polluted water and surfaces
- Working around heavy equipment
- Vehicle/ driving safety
- Cuts, punctures
- Eye injuries
- Fall injuries
- Fatigue

***If you or a co-worker gets injured:  
know how to get help.***