

## **Disaster Cleanup and Recovery PPE Matrix**

Workers engaged in disaster cleanup and recovery activities may be exposed to a variety of hazards. A comprehensive list of potential hazards and controls, sorted by common tasks, can be found in OSHA's Hurricane eMatrix. Specialized operations, such as electrical power restoration, hazardous materials response, or confined space entry require controls specified in the applicable OSHA standards.

- Designing a way around a hazard is always the preferred control method. For example, installing a guardrail to prevent a fall from occurring is better than relying on a safety harness and lanyard to catch the worker after a fall occurs. However, in many cases personal protective equipment (PPE) may be
- the only practical control method. All PPE has limitations and is the control method of last resort.
- The suggested PPE Matrix is provided to assist employers in determining the PPE needed for a specific task. Respiratory protection is addressed below the matrix.

PPE	Task	Normal Cleanup Activities	Working in Wet Conditions	Working with Chain Saws	Working Near/Over Water	Working at Heights Over 6 ft.	Working Near Loud Noise
Head	Hard Hat	X	Х	Х	Х	Х	Х
Eyes	Safety Glasses	Х		Х	Х	Х	Х
	Safety Goggles		Х				
Face	Face Shield			Х			
Ears	Hearing Protection			Х			Х
Hands	Work Gloves	Х		Х	Х	х	Х
	Latex/Rubber Gloves		x				
Body	Hi-Visibility Garment	Х	Х	Х	Х	Х	Х
	Impervious Body Suit		х				
	PFD and Life Ring				Х		
	Chaps			Х			
	Fall Protection					Х	
Feet	Steel Toe Boots	Х		Х	Х	Х	Х
	Waterproof Boots		Х				
Other PPE	Workboat/Skiff				Х		

**Respiratory Protection**: The employer must assess site-specific conditions for potential respiratory contaminants and protection.

- In many cases, N-95 filtering facepiece respirators may be adequate for dust or other particulates.
- Where mold is known to be or potentially may be present, use an approved respirator.
  See the OSHA fact sheet on Mold Hazards during Disaster Cleanup (OSHA FS-3713) for further guidance.
- Where asbestos is known to be or potentially may be present and disturbed, higher levels of protection are required (e.g., P100 particulate filter respirator).
  - In addition, the requirements of OSHA's Asbestos standard, 29 CFR 1910.1001, also need to be followed.
- Where chemical contaminants are present, such as organic chemicals, different cartridges or filters are required depending on the chemical.
- Common respirators do not protect workers from carbon monoxide (CO), which is present

- in the exhaust from generators and other internal combustion engines.
- Respirator selection and use is regulated due to the potential risk to workers.
  - Employers who provide N-95 filtering facepiece respirators for *voluntary* use by their employees need to provide their workers with Appendix D of OSHA's Respiratory Protection standard, 29 CFR 1910.134. Appendix D provides precautions that workers should take to ensure that the respirator does not present a hazard.
  - Where employers mandate the use of respirators, additional requirements of the Standard apply, including fit testing and medical evaluation.
- Training regarding the limitations of respirators, proper fitting, when they should be replaced, and medical considerations for the user is essential.

**Sanitation and Hygiene**: In addition to PPE, proper sanitation and hygiene are essential for minimizing the spread of contaminants and disease. Handwashing is a critical component of good hygiene. In the absence of suitable facilities, workers should be provided with hand sanitizer.

- It is essential that employers assess each site and operation individually to determine the actual or potential hazards based on sitespecific conditions. Employees must always be trained to recognize hazards and take necessary precautions.
- Workers relying on PPE must be trained to recognize these limitations, as well as the safe ways to put on and remove PPE, properly store it, take care of it, and when it's time to replace it.

Additional guidance, Fact Sheets, and other information can be found on OSHA's Hurricane webpage. Another source of information is the resource webpage maintained by the National Institute of Environmental Health Sciences (NIEHS).

This is one in a series of informational fact sheets highlighting OSHA programs, policies, or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



www.osha.gov (800) 321-OSHA (6742)



U.S. Department of Labo