



Safety Fax
IMT Safety Officers
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Hurricane Katrina Emergency Response

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PPE Fact Sheet for Flood Response Work

The Safety Assistance Team in consultation with the Center for Disease Control, and the National Institute for Occupational Safety and Health (NIOSH) provides the following interim guidelines and warnings to flood cleanup workers. The hazards in flood waters are likely variable and can include sewage, household chemicals and cleaning solutions, petroleum products, hazardous industrial chemicals, pesticides, and flammable liquids. Workers must also be aware of dangers from physical hazards such as obstacles covered by flood waters (storm debris, depressions, drainage openings, ground erosion) and from displaced reptiles or other animals.

Workers and volunteers involved with flood cleanup should avoid direct skin contact with flood waters if possible and through the use of appropriate PPE and clothing. In most instances, the selection of PPE will be dependent on site-specific conditions, hazards, and tasks. The list below provides interim guidance on PPE and clothing for flood response workers responding to Hurricane Katrina:

- ? Workers who must walk through debris and building material should wear serviceable workboots. Tennis shoes or sneakers should *not* be worn because they will transfer contamination and will not prevent punctures, bites, or crush injuries. Hip waders may be appropriate to help prevent contact with flood waters.
- ? Heavy, waterproof, cut-resistant work gloves or other types of protective gloves may be required if handling identified material hazards; gloves not disposed of after use should be cleaned with soap and water and dried between uses.
- ? Wear goggles, safety glasses with side shields or full face shields. Sun/glare-protective lenses may be needed in some work settings.
- ? Wear soft hat or other protective head cover. Wear an American National Standards Institute (ANSI) rated hardhat if there is any danger of falling debris or electrical hazards.
- ? Hearing protection is needed (when working in an environment with any noise that you must shout over to be heard).
- ? Comfortable, light weight clothing including long pants and a long-sleeved shirt or coveralls should be the standard dress unless otherwise indicated by a hazard assessment.
- ? Cleanup operations involving incidental exposure to airborne dust produced by drying silt or mist from pumping floodwater should include the use of NIOSH approved, N-95 dust masks. Those given the N-95 dust masks should be instructed on the proper donning and use. For work involving higher, prolonged level of exposures, an occupational safety and health professional should be consulted to reevaluate PPE selection for particular tasks.
- ? In the event of skin contact with the contaminated water or debris, employees should wash thoroughly with soap and water as soon as possible.

In all instances, workers are advised to wash their hands with soap and clean water, especially before eating or drinking. Workers should be encouraged to carry and use liquid hand sanitizer. Protect any cuts or abrasions with waterproof gloves and dressings.

Flood waters are associated with strong odors but these odors do not indicate the need for use of respirators. However, additional PPE, respiratory protection, or clothing may be required when specific exposure hazards are identified or expected at the work site. In some instances, the protective ensemble components (garment, boots and gloves) may need to be resistant to contaminated flood or other site-specific chemical, physical, or biological hazards.

The use of insect repellent, sun block and lip balm may also be required for some work environments. Drink plenty of bottled water and take frequent rest breaks to avoid overexertion. Updated vaccinations (within the last 10 years) for Tetanus-Diphtheria are recommended but not required for workers involved in hurricane response.

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