

WORKER SAFETY DURING FLOODING AND CLEANUP



Common worker hazards^{2,3} during or after a flood

- Drowning
- Electrical hazards
- Floodwater exposure to chemical or biological hazards
- Sharp or jagged debris
- Rodents, snakes, insects
- Tree/limb removal
- Slick and unstable surfaces
- Lifting injuries
- Mold
- Hypothermia
- Carbon monoxide

What is the hazard?

Many areas of Kentucky are currently being impacted by significant flooding. Flooding is Kentucky's most frequent natural disaster.¹ Kentucky workers may be exposed to a number of hazards both during the flooding and the subsequent response and cleanup efforts.

The following are cases of Kentucky workers who were killed due to flooding or flood cleanup efforts:

- Case 1 : A 49-year-old electrician was electrocuted while replacing flood-damaged electrical cable. (2024)
- Case 2: A 45-year-old on duty law enforcement officer called for a tow truck after his vehicle ran off the road. Soon after, the officer reported that his vehicle was sinking into the water very quickly and that he needed a rescue. A witness saw the officer climb onto the top of his vehicle. The witness stated he saw the officer jump from the top of the vehicle into the water but never saw him resurface. Strong currents pulled the victim and his vehicle several hundred feet from where he entered the water. (2018) ([Read the full report](#)).
- A 40-year-old taxi driver was working when his cab was submerged in flash floodwaters. He was unable to exit the vehicle and drowned. The area was under a flash flood warning. (2018)

Keeping workers safe during flooding and flood response/cleanup^{2,3}



Employers should be prepared for flooding: Find out if your worksite is in an area susceptible to flooding. If you are in an area prone to flooding, monitor local news sources or the National Weather Service for flood watches and warnings. Have plans for evacuation and ensure that all workers know what to do in case of an emergency.

Driving during flood conditions: Employers should prepare workers who drive as part of their job to take extreme caution when driving in flood conditions. Drivers should be instructed not to drive through flooded areas and to turn around and find another route. Cars can be easily swept away in flood waters even when it may not appear deep. Special caution should also be taken at night when visibility is low. Drivers should follow signage and avoid driving around barriers.⁴

Drowning: Workers should not work alone near water and should always wear a Coast Guard-approved flotation device. Even experienced swimmers can be overtaken by fast-moving flood waters.

Electrical hazards: Downed and damaged power lines are common during flooding. Workers should be advised to stay back from any downed lines and to report to the appropriate electrical utility company. Only trained electrical utility workers should work on damaged utility lines. Electrical utility workers should complete a job hazard analysis before beginning any work, and, whenever possible, the lines should be de-energized before work begins.

Tree/limb removal: Fall and crush or struck by injuries are common in tree removal. Also, downed trees/limbs have the potential to be in contact with energized power lines and should be inspected prior to beginning work. Workers should conduct an analysis of hazards before beginning work. Only equipment that is built to be used in wet conditions should be used. Appropriate protective equipment should be used, including fall protection, eye protection, head protection, gloves, foot protection, and hearing protection.

Sharp and jagged debris: Workers involved in cleanup may come in contact with sharp debris. Heavy gloves, boots, eye protection, long pants and sleeves, and head protection can help minimize cuts and scrapes. Tetanus is a potential risk for people who do sustain a wound.

Chemical and biological hazards: Chemicals, sewage, and remains can be present in floodwaters. Wearing waterproof gloves under a pair of heavy work gloves provides some protection against floodwater exposure. Workers should also practice good hygiene after exposure to floodwater.

Slick/unstable surfaces: Ensure workers have slip resistant shoes and lifelines tied off to anchor points when appropriate.

Lifting injuries: To help prevent back, knee, and shoulder injuries, workers should use proper lifting techniques. Teams of two or more should be utilized to move heavy or large objects.

Mold: An N-95 respirator, eye protection, and hand protection are recommended when working in areas with mold. Ventilate the work area. Avoid mixing bleach with ammonia-containing cleaning products when cleaning surfaces.

Hypothermia: Select proper clothing for wet and cold conditions. Take frequent breaks in a warm, dry, sheltered area. Avoid working alone and becoming over fatigued.

Carbon monoxide: Gasoline and diesel-powered generators, pumps, and pressure washers all release carbon monoxide. These devices must be operated outdoors.

RESOURCES

Name of Resource	Resource Description	Resource Link
Flood Preparedness and Response	OSHA website that provides guidance and resources for flood preparedness and response.	https://www.osha.gov/flood
Hazard Based Guidelines: Personal Protective Equipment for Workers in Hurricane Flood Response	NIOSH resource that provides guidance on personal protective equipment for hazards encountered during flood response.	https://tinyurl.com/mpfpvrv3
How to Protect Workers in Flooded Areas	Teamsters guide detailing personal protective equipment and other measures to keep workers safe during flood response.	https://teamster.org/wp-content/uploads/2022/10/10322HowtoProtectWorkersinFloodedAreas.pdf
Flooded Roadways: Turn Around Don't Drown	US Army Reserve safety alert detailing hazards of driving in flooded areas.	https://tinyurl.com/2t7vypmh

SOURCES

1. Flooding in Kentucky.
<https://eec.ky.gov/Environmental-Protection/Water/FloodDrought/Documents/KentuckyFloodFactSheet.pdf>
2. Flood Preparedness and Response. <https://www.osha.gov/flood>
3. Hazard Based Guidelines: Personal Protective Equipment for Workers in Hurricane Flood Response.
https://archive.cdc.gov/www_cdc.gov/niosh/topics/emres/pre-workers.html
4. Flooded Roadways: Turn Around Don't Drown.
<https://tinyurl.com/2t7vypmh>



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Acknowledgments

Produced by the Kentucky Occupational Safety and Health Surveillance (KOSHS) Program of the Kentucky Injury Prevention and Research Center (KIPRC) as bona fide agent for the Kentucky Department for Public Health.

This work was supported by the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS), as part of cooperative agreement 5 U60OH008483 totaling \$1,601,266 with 0% financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, NIOSH, CDC, HHS, or the U.S. government.



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