



NEWSLETTER

**LETTER FROM THE EDITOR****August 2026**

Greetings Community of Practice Members!

As we near the peak of the 2026 hurricane season, we are focusing our August 2026 newsletter on the hidden dangers in hurricane cleanup and recovery. While hurricanes create immediate threats to life and safety, the response and recovery period introduces a range of less visible hazards. As residents return to damaged homes and begin cleanup, they may encounter toxic exposures from contaminated floodwater, chemical use, debris, and fuel handling.

We hope you enjoy this newsletter, and if you would like to hear more about a specific topic in a future newsletter, please feel free to reach out to our team. Thank you all for your support and continuing to make PCPHCoP a success!

Sincerely,
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TABLE OF CONTENTS

[Letter From the Editor](#)[Hurricane Season](#)[Floodwater](#)[Chemical Exposures](#)[Mold Remediation](#)[Pests and Vectors](#)[Fuel Storage](#)[Carbon Monoxide](#)[PCs and PH](#)[Announcements](#)[References](#)

Hurricane Season and the Hidden Dangers

Hurricanes, otherwise known as typhoons and tropical cyclones, are one of the most destructive weather-related hazards.¹ The Atlantic hurricane season runs from June 1 through November 30, peaking between August and October, while Guam, the Northern Mariana Islands, and Micronesia can experience typhoons any time, but the peak is during July through November.¹ Hurricanes can bring high winds, heavy rain, and flooding, causing immediate damage and leaving behind hidden hazards that can affect health long after the storm passes.¹⁻³ From chemical spills to mold growth, contaminated water, and carbon monoxide risks, knowing what to watch for is key to [staying safe during cleanup and recovery](#).³



Some Common Hidden Risks

- Chemical Spills & Household Hazards: Floodwaters can mix with household chemicals, pesticides, or fuels, creating toxic conditions.³
- Mold & Water Damage: Moisture left behind by flooding promotes mold growth, which can cause respiratory issues, skin irritation, and allergic reactions.³
- Contaminated Water: Floodwater may contain bacteria, sewage, and chemicals.^{3,4}
- Carbon Monoxide (CO) Poisoning: Using generators, grills, or fuel-burning devices indoors or placing the generator within 20 feet of your home's doors, windows, and vents can quickly lead to CO poisoning.^{3,4}
- Debris & Hidden Structural Hazards: Downed trees, nails, and weakened structures pose injury risks.^{3,5}
- Increased Interaction with Pests: Rodents, snakes, and other animals may be displaced after a hurricane and wander into human-populated areas. Mosquitoes and other insects may also increase from laying eggs in standing water.⁶



One way that many of these hidden risks are monitored after a storm is through America's Poison Centers (APC) National Poison Data System (NPDS). APC uses an emergent code after hurricanes that is added with any exposures that happen during and because of the hurricane. This is a great way to track these exposures and help increase collaboration with public health professionals to address these exposures.

Floodwater: A Complex Exposure

After a hurricane, there could be flooding leftover from the impact of the storm. However, the standing floodwater is rarely "just water." It can contain a mixture of biological, chemical, and physical hazards that pose health risks during and after hurricane recovery.^{3,4}

Potential contaminants:

- Biological hazards:⁷
 - Bacteria and viruses and parasites from sewage overflow that may cause infections
 - Fungal spores from water-damaged materials that may contribute to infections
- Chemical hazards:^{5,7}
 - Gasoline, motor oil, and other petroleum products from vehicles, generators, or storage containers that may have leaked or been damaged
 - Household chemicals like bleach, ammonia, pesticides, and cleaning solvents from damage or cleaning
 - Industrial runoff from flooding containing heavy metals or other toxic compounds
- Physical hazards:⁵
 - Sharp objects like nails, broken glass, or metal debris that were moved around from the impact that may cause cuts or puncture wounds
 - Sediment and debris in floodwater that can cause cuts or abrasions
 - Downed power lines hidden by floodwater that may cause electrical shocks or electrocution



Exposure pathways:⁵

- Skin contact: Floodwater can enter through cuts, abrasions, or chapped skin, leading to skin irritation, infection, or chemical absorption.
- Ingestion: Accidental swallowing of contaminated water or contaminated food can cause gastrointestinal illness.
- Inhalation: Aerosols from floodwater, especially when using high-pressure hoses or power washers, can introduce bacteria or chemical fumes into the respiratory system.

Potential health effects:⁵

- Skin rashes, infections, or chemical burns
- Gastrointestinal illness, vomiting, or diarrhea
- Respiratory irritation, infections, coughing, or wheezing
- Allergies or asthma attack
- Long-term exposure to chemical contaminants can affect the liver, kidneys, or nervous system

Floodwater Safety Tips:⁵

- Avoid going into floodwater.
- Wear waterproof shoes and clothes near floodwater.
- Wash skin and clothes thoroughly with soap and clean water after any contact with floodwater.
- Seek medical attention if you get a puncture wound in floodwater.
- Do not allow children or pets to play in floodwater.



Chemical Exposures During Cleanup

Cleanup efforts often involve disinfectants, solvents, and strong cleaning agents, which can be hazardous if used improperly.² It is important to read labels, use chemicals in well-ventilated areas, and always wear gloves, masks, eye protection, and other personal protective equipment (PPE) when cleaning.² Dilution of some products may also be necessary to get the appropriate strength when cleaning.⁴ Make sure to read all instructions when doing any type of dilution or clean-up for your safety and the safety of those around you.

Common risky scenarios:^{2,4}

- Mixing incompatible products (e.g., bleach + ammonia) → can release toxic gases
- Using strong chemicals in poorly ventilated spaces → risk of respiratory irritation
- Prolonged exposure without gloves, masks, or eye protection → risk of skin and eye injury

Potential health effects:²

- Coughing, wheezing, or shortness of breath
- Eye redness, burns, or irritation
- Nausea, dizziness, or headaches

Mold Remediation and Cleanup Risks



The increased moisture and humidity after hurricanes create ideal conditions for mold growth, sometimes as quickly as 48–72 hours.⁸ This rapid growth can happen in items like drywall, insulation, other building materials, furniture, and carpets, and it can happen before the damage is visible on the outside.⁸ As community members begin returning to their homes and cleaning up after a hurricane, they may encounter widespread contamination [in and around their homes](#), particularly in enclosed or poorly ventilated spaces.^{8,9}

Mold exposure is one of the more common concerns after a flooding incident and can pose significant health concerns. While some individuals may experience no symptoms, others may show signs of mold exposure like stuffy nose, sore throat, coughing, wheezing, burning eyes, or developing a rash.¹⁰ Some individuals may develop severe health effects from mold and should not participate in any clean-up of mold, including:¹¹

- Those with allergies, or those who may be sensitive to mold
- Those with lung disease or those who are immunocompromised
- Those with other or chronic respiratory diseases, such as asthma or chronic obstructive pulmonary disease (COPD)

While mold itself presents risks and negative health outcomes, clean-up activities also introduce additional hazards. Cleaning agents that can pose a toxic risk are often used to remove mold and disinfect surfaces. A common cleaning agent that is used is bleach, which can create a greater harmful exposure than the original risk if it is used improperly or mixed with other cleaning agents.^{2,11} Some of the key concerns during the cleaning process are overusing bleach, mixing bleach products that can release toxic gases (e.g. bleach and ammonia), cleaning in enclosed or poorly ventilated spaces, and not using proper PPE.^{2,11}

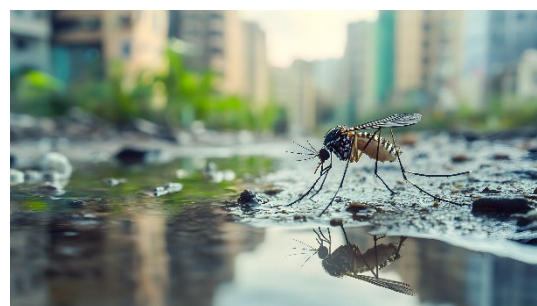
Safe Cleanup Practices for Mold:

- Wear PPE that covers the mouth, nose, skin, and eyes.^{10,11} (View this [infographic](#) for proper PPE when cleaning mold)
- Never mix cleaning agents.^{3,10}
- Follow any instructions on a cleaning agent or disinfectant.¹⁰
- Dry anything that is wet as quickly as possible to limit mold growth.⁸
- Stay in well-ventilated spaces when doing clean-up.³
- Take breaks when needed.³



Pest Bites and Vector Concerns

Humans are not the only ones that are affected by a hurricane. These storms disrupt ecosystems and displace pests like rodents and snakes while also increasing breeding habitats for mosquitoes and other insects.⁶ Standing water, debris, and damaged structures create ideal breeding and shelter conditions for pests, allowing them to grow rapidly after a storm.⁶ As the community begins recovery, [the risk of bites, stings, and the associated health effects](#) from them increases.⁶



Some common pests that can increase after a storm:

- Mosquitoes:⁶
 - Standing water left by flooding creates ideal breeding conditions
 - Generally, they are more a nuisance than a spreader of diseases after a storm, but if they are left to continue spreading, they may be able to transmit diseases
 - Bites can be raised, inflamed, and itchy
- Rodents:^{6,12}
 - Damaged or unattended buildings can bring rodents to the area
 - They can spread diseases and bite humans and pets
 - Signs of rodents in an area are small droppings, nesting signs like shredded paper, holes chewed in walls and floors, and stale smells
- Snakes:⁶
 - May seek shelter in buildings or seek new shelter in debris if their habitat has been disrupted from a storm
 - Some snakes are venomous and could bite both humans and pets if disturbed
 - Signs and symptoms of snake bites can include puncture holes on the skin, swelling and pain around the bite or puncture holes, nausea and vomiting, blurred vision, or numbness and tingling



Fuel Storage and Handling Risks

Power outages following hurricanes often lead to increased use of portable generators, gasoline, propane, and other fuel sources for electricity for cooking, heating, and air. While these are essential during recovery, they also introduce significant risks, particularly when fuels are stored, transported, or handled improperly.¹³

In the immediate aftermath of a storm, fuel may be stored in homes, garages, or temporary containers because of limited availability of supplies or limited distribution.¹³ This can increase the likelihood of spills, vapor exposure, and accidental ingestion.¹³ Even small amounts of gasoline can produce fumes that accumulate quickly indoors, which can pose toxic fume exposures and fire hazards.¹⁴



Fuel handling during generator use and clean-up activities also presents risks. Refueling hot or running equipment can lead to fires or burns, while improper transfer methods, like siphoning, can result in unintentional ingestion or aspiration of fuel.^{13,14}

The Dangers of Carbon Monoxide

One of the most severe outcomes associated with fuel use is carbon monoxide (CO) poisoning. CO is a colorless, odorless gas produced by fuel-burning equipment. CO exposure can occur quickly and without warning, particularly when generators or engines are used in enclosed spaces or placed too close to a building.^{3,4}



Common risks after a hurricane:

- Operating generators or gas grills indoors, in a garage, or within 20 feet of a building^{3,4}
- Storing gasoline in unapproved containers¹³
- Refueling equipment while it is still running or hot¹⁴
- Siphoning fuel, leading to accidental ingestion or inhalation¹³

Potential health impacts:

- Carbon monoxide poisoning: headache, dizziness, nausea, confusion, loss of consciousness, and death¹⁵
- Fuel vapor exposure: eye irritation, dizziness, and headaches¹⁵
- Fuel ingestion: vomiting, cough, or harmful effects on nervous system^{14,15}

Carbon Monoxide Safety Recommendations¹⁶

- Never use a generator inside your home or garage, even if doors and windows are open.
- Only use generators outside, more than 20 feet away from any windows, doors, and vents.
- When using a generator, use a battery-powered or battery backup CO detector in your home.

How Poison Centers and Public Health Work Together

America's Poison Centers and participating poison centers developed tools to strengthen coordination between poison centers and health departments during disasters. These include AI-enhanced toxicovigilance within the National Poison Data System® (NPDS), disaster surveys and webchat through PoisonHelp.org, and technologies that support geolocation and real-time situational awareness. Together, these tools support earlier detection of emerging exposures, improved public communication, and stronger disaster response coordination.

Poison Emergency?
Call 1-800-222-1222 OR
Visit [POISONHELP.ORG](https://www.poisonhelp.org)

ANNOUNCEMENTS

Thank you to everyone who joined our last webinar on May 27th to hear about preparedness strategies both health departments and poison centers are taking for this summer's international soccer competitions. It was great to hear about all the work that has gone into this exciting event and how trusted agencies are preparing to keep our communities safe.

The next quarterly PCPHCoP webinar will be held **August 26th, from 3:00 PM to 4:00 PM Eastern Time**. The topic will be shared with the listserv once it is finalized.

If anyone wants to be added to the PCPHCoP email distribution list, a request can be sent to PCPHCoP@cdc.gov.

References

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