



## FACT SHEET

# Protect Yourself From Chemicals Released During a Natural Disaster

During emergencies such as hurricanes and floods, chemicals that have the potential to harm people's health might be released from businesses, homes, and other sources into the environment. This document provides information and resources that people can use to protect themselves from dangerous chemicals.

## Protect Yourself by Taking These Steps

- If you suspect someone has been poisoned by a chemical, call 911 or the national poison control center at 1-800-222-1222.
- If you suspect that a pet has been poisoned by a chemical, call the Animal Poison Control Center toll-free at 1-888-426-4435.
- Report oil and chemical spills to the local authorities or to the U.S. Environmental Protection Agency (EPA) National Response Center at 1-800-424-8802.
- Each situation is different. Listen to announcements or alerts from authorities concerning chemical safety and disposal issues. Federal agencies such as CDC and EPA, and state and local officials will keep communities informed about what chemicals may have been released into the environment and what actions, if any, people need to take to protect themselves. For example, the results of EPA sampling for chemicals in the environment following Hurricane Katrina are available at [www.epa.gov/katrina](http://www.epa.gov/katrina).
- Some chemical releases may require authorities to advise people to stay out of the area or, depending on where they live, to evacuate or to shelter in place. Listen to local announcements for guidance on what to do. For general information on evacuation, see "Chemical Agents: Facts About Evacuation" ([www.bt.cdc.gov/planning/evacuationfacts.asp](http://www.bt.cdc.gov/planning/evacuationfacts.asp)). For general information on sheltering in place, see "Chemical Agents: Facts About Sheltering in Place" ([www.bt.cdc.gov/planning/shelteringfacts.asp](http://www.bt.cdc.gov/planning/shelteringfacts.asp)).
- After an emergency, federal, state, and local personnel will be working to establish debris-management programs, including household hazardous waste collection and disposal programs. These efforts may take days or weeks to come to all communities. In the meantime, exercise caution and report concerns to local environmental, health, and waste disposal authorities.
- Wash skin that may have come into contact with dangerous chemicals. Coming into contact with a dangerous chemical may make it necessary for you to remove and dispose of your clothing right away and then wash yourself. Removing your clothing and washing your body will reduce or remove the chemical so that it is no longer a hazard. This process is called decontamination. For more information, see "Chemical Agents: Facts About Personal Cleaning and Disposal of Contaminated Clothing" ([www.bt.cdc.gov/planning/personalcleaningfacts.asp](http://www.bt.cdc.gov/planning/personalcleaningfacts.asp)).
- For more information on protecting yourself during clean-up work after a hurricane or flood, see "Clean Up Safely after a Hurricane" ([www.bt.cdc.gov/disasters/hurricanes/cleanup.asp](http://www.bt.cdc.gov/disasters/hurricanes/cleanup.asp)), "Floods" ([www.bt.cdc.gov/disasters/floods](http://www.bt.cdc.gov/disasters/floods)), and "Natural Disasters: Response, Cleanup & Safety for Workers" ([www.bt.cdc.gov/disasters/workers.asp](http://www.bt.cdc.gov/disasters/workers.asp)).

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### Be Aware of Local Sources of Chemicals

Be aware of the sources of chemicals and conditions in your area and take steps to protect your health when returning home after an emergency. During emergencies, chemicals are most commonly released from the following sources: businesses and industries (such as chemical plants and oil refineries), storage tanks, agricultural facilities, and homes.

The types and amounts of chemicals released depend on factors such as (1) type of facilities in the area, (2) types of chemicals produced or kept at affected facilities and homes, (3) structural damage to facilities and homes, (4) weather conditions, and (5) the extent of flooding. Amounts of chemicals released may be higher nearer to industrial sources.

### Dispose of Household Chemicals Safely

People can be exposed to dangerous chemicals from everyday items such as household cleaners, fertilizers, and pesticides that may spill in or near the home during an emergency. Be alert for leaking containers and reactive household chemicals, such as caustic drain cleaners and chlorine bleach, and take the following necessary precautions to prevent injury or further damage:

- Keep children and pets away from leaking or spilled chemicals.
- Do not combine chemicals from leaking or damaged containers, because doing so might produce dangerous reactions.
- Do not dump chemicals down drains, storm sewers, or toilets.
- Do not try to burn household chemicals.
- Clearly mark and set aside unbroken containers until they can be properly disposed.
- Leave damaged or unlabeled chemical containers undisturbed whenever possible.

Source: U.S. Environmental Protection Agency (EPA), "Dealing with Debris and Damaged Buildings" ([www.epa.gov/katrina/debris.html](http://www.epa.gov/katrina/debris.html)).

Also see the National Library of Medicine's Household Products Database (<http://householdproducts.nlm.nih.gov>) for information on safely handling household products.

### Avoid Oil Spills

Crude oil is a mixture of chemicals that could be released into the environment during an emergency such as a hurricane and flood. In flood situations, some parts of the oil will float on water and can be seen as a film on the surface, and other parts will sink to the bottom. Other parts of the oil can become fumes in the air. People can come into contact with these chemicals by getting them on their skin or by breathing them in the air. If you notice oil in the water, stay away from it and contact local authorities or EPA at 1-800-424-8802. Emergency responders and workers should use appropriate clothing and personal protective equipment when working in these hazardous conditions.

### Additional Chemical Resources

#### Centers for Disease Control and Prevention (CDC)

- Natural Disasters ([www.bt.cdc.gov/disasters](http://www.bt.cdc.gov/disasters))
- Chemical Emergencies ([www.bt.cdc.gov/chemical](http://www.bt.cdc.gov/chemical))
- Chemical Safety Cards ([www.cdc.gov/niosh/ipcs/icstart.html](http://www.cdc.gov/niosh/ipcs/icstart.html))
- NIOSH Pocket Guide to Chemical Hazards ([www.cdc.gov/niosh/npg](http://www.cdc.gov/niosh/npg))

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### Agency for Toxic Substances and Disease Registry (ATSDR)

- Hazardous Substances in the Environment ([www.atsdr.cdc.gov/2p-toxic-substances.html](http://www.atsdr.cdc.gov/2p-toxic-substances.html))

### Department of Energy (DOE)

- Material Safety Data Sheets ([www.eh.doe.gov/chem\\_safety/Msds.html](http://www.eh.doe.gov/chem_safety/Msds.html))

### Environmental Protection Agency (EPA)

- Environmental Protection Agency (EPA): Hurricanes ([www.epa.gov/naturalevents/hurricanes.html](http://www.epa.gov/naturalevents/hurricanes.html))
- Pollutants/Toxics ([www.epa.gov/eftpages/pollutants.html](http://www.epa.gov/eftpages/pollutants.html))

### National Library of Medicine (NLM)

- Chemical Information (<http://sis.nlm.nih.gov/chemical.html>)
- Tox Town ([http://toxtown.nlm.nih.gov/index\\_content.html](http://toxtown.nlm.nih.gov/index_content.html))

For more information, visit [www.bt.cdc.gov/disasters](http://www.bt.cdc.gov/disasters),  
or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).

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