



Department of Health

Bureau of Environmental
Health & Radiation
Protection

Chemicals in Floodwaters

Answers to Frequently Asked Questions

Flooding in Ohio is a common occurrence. Understand what you need to do to protect you and your family from chemicals that may be released during flooding events.

What types of chemicals may be in floodwaters?

Floodwater is not just rain. Floodwater contains many things that can be harmful to your health like trash, germs, and many kinds of chemicals.

Exactly which chemicals may be in floodwaters depends on where you live, what sources of chemicals are around your community, and how bad the flooding. Main sources of chemicals in floodwaters are:

- **Businesses.** Industries like oil refineries, plastics factories, and dry cleaners can release large amounts of many different chemicals into floodwaters.
- **Storage Tanks.** Storage tanks can hold many kinds of chemicals like fuel or acids. If these tanks are damaged by a storm event or flood, the chemicals inside can spill.
- **Farms.** Farms use many kinds of chemicals like insecticide (bug spray), herbicide (weed killer), and fertilizer. These chemicals may be on crops, in the soil, or in storage tanks on the farm.
- **Homes.** Common household chemicals like bleach, drain cleaner, paint thinner, gasoline, and bug spray can be washed out from houses, sheds, and garages.



Floodwaters contain more than just rain water or overflow from lakes and rivers. Many harmful chemicals may be in floodwater.

How do I protect myself from chemicals in floodwaters?

Every flood is different. Always listen to announcements and alerts from authorities. Authorities can include your local health department, fire department, police, state health and environmental agencies, and federal health and environmental agencies. Follow all evacuation orders you may be given.

If you believe someone has been poisoned from chemicals in floodwater, call 911 or contact Poison Control at (800) 222-1222. If you believe your pet or farm animal has been poisoned, contact your veterinarian or Animal Poison Control at (888) 426-4435 (please check as there may be a fee for this service).

Be aware of possible chemical sources in your community. Levels of chemicals in floodwaters may be higher if you are near an industrial area or a factory. Keep out of floodwaters. Do not wade or swim in floodwaters. Never drink floodwater or any water that may have been contaminated. Never eat any food that may have touched floodwater.

If you touch floodwater, remove all wet clothes as soon as possible and wash your skin well with soap and clean water. If you get floodwater in your eyes, wash them out with clean water or artificial tears eye wash (saline solution).

Avoid oil spills. Oil can float on the surface of the water, sink to the ground, or turn into fumes in the air. Never use fire or anything that sparks if you can see or smell oil. Oil in water can still catch on fire and cause burns. Report chemical and oil spills to local authorities immediately. The Ohio EPA maintains an emergency spill hotline at (800) 282-9378. The National Response Center also accepts reports of spills or releases at (800) 424-8802.

How do I protect myself from chemicals after a flood is over?

After floodwaters have left a flooded area, there may still be dangers including damaged buildings, debris, spilled chemicals, washed-out roads, mold, and mud. Follow any instructions you are given from authorities on how to protect yourself when returning to your home after a flood.

Keep children, elderly people, pregnant women, and pets out of the house until all home clean-up is finished.

Seek immediate medical care if you become injured or sick during clean-up.

Protect yourself during clean-up by wearing personal protective equipment like rubber boots, rubber gloves, goggles, and N-95 respirator (a type of mask that can keep out tiny particles).

Watch out for any opened or broken chemical containers. Do not move or touch broken chemical containers. Never burn household chemicals or pour them down the sink, into the toilet, or in the sewer. Never mix chemicals together in one container.

If you are using a generator for power, never put the generator inside your home, basement, garage, crawlspace, shed, or other indoors areas. Generator exhaust contains carbon monoxide, an invisible gas that can cause suffocation.

Throw away any food or drinks in your home that may have touched floodwaters. See fact sheets and resources on food safety after flooding at <http://www.odh.ohio.gov/odhprograms/eh/foods/Emergency.aspx>.

Do not drink your tap water if local authorities have issued a do-not-drink water advisory. Do not drink from a private well if the well was flooded. See fact sheets and resources at <https://www.odh.ohio.gov/odhprograms/eh/water/PrivateWaterSystems/main.aspx>.

Be aware that buildings that had water inside can quickly become moldy. Mold can cause respiratory (lung) illnesses. Wet materials should be removed from the house, and mold should be cleaned with bleach. See fact sheets and resources on mold cleanup at <https://www.odh.ohio.gov/odhprograms/eh/healthyhomes/healthy1.aspx>.

After clean-up is finished, wash wet and dirty clothes in hot water and detergent, and wash your skin well with soap and clean water.

Resources

CDC, 2014, Protect Yourself from Chemicals Released During a Natural Disaster, Centers for Disease Control and Prevention, Atlanta, GA.

EPA, 2017, Recover After a Hurricane, U.S. Environmental Protection Agency, Washington, D.C.

CDC, 2017, Keep Food and Water Safe After a Disaster or Emergency, Centers for Disease Control and Prevention, Atlanta, GA.

CDC, 2017, Facts About Mold and Dampness, Centers for Disease Control and Prevention, Atlanta, GA.

Where can I get more information?

Ohio Department of Health
Bureau of Environmental Health and Radiation Protection
Health Assessment Section
246 N. High Street
Columbus, Ohio 43215
Phone: (614) 728-9452

ODH Healthy Homes (for information on mold)
Phone: (877) 532-3723

ODH Food Safety (for information on food safety)
Phone: (614) 644-7416

ODH Private Water and Sewage Systems (for information on flooded water wells and sewage systems)
Phone: (614) 644-7558



Keep yourself safe from chemicals, germs, and mold during and after a flood.