

STAY SAFE AFTER A FLOOD



Floods can create conditions that are harmful to both your physical and mental health. This fact sheet explains some of the health risks to look out for after a flood and ways you can protect the health of your family and community during the recovery process.

This is the third fact sheet in the 'Flooding and Safety' series. The other two are:

- **Preparing for Floods: Manage Stress and Increase Safety (URL: xxx)**
- **Stay Safe During a Flood (URL:xxx)**

Flood-related Hazard	Floodwaters	Damaged or flooded drinking water source	Power outages
Common threats to health and safety after a flood	• May contain hidden dangers that can cause injury or sickness, such as human and animal waste, trash, toxic chemicals, hazardous waste, downed power lines, and other debris. • Drowning. • Flooded roadways that can cause car crashes or sweep cars away.	• Flooding can damage public water supplies and private residential wells. Damage increases risk of contamination. • Polluted drinking water supplies can cause diarrheal disease and other kinds of sickness.	• Carbon monoxide poisoning from improper generator use.
What to do to stay safe	• Stay out of floodwaters. • If you have to wade through or touch floodwaters, wash with soap and clean water as soon as possible. • Take care of wounds as soon as possible. • Do not drive into floodwaters. Turn around, don't drown!	• Test private wells. The Center for Disease Control (CDC) has more information about Disinfecting Wells After a Disaster (URL: bit.ly/Disinfect-Wells). • Check for boil water advisories. • Do not use water that you suspect or have been told is contaminated to drink, brush your teeth, wash and prepare food, make ice, or make baby formula.	• Never use a generator inside your home or garage. • Generators should be at least 20 feet from any door, window, or vent.

Help Others



Check in on elderly neighbors and people with chronic illnesses that may need help cleaning up.

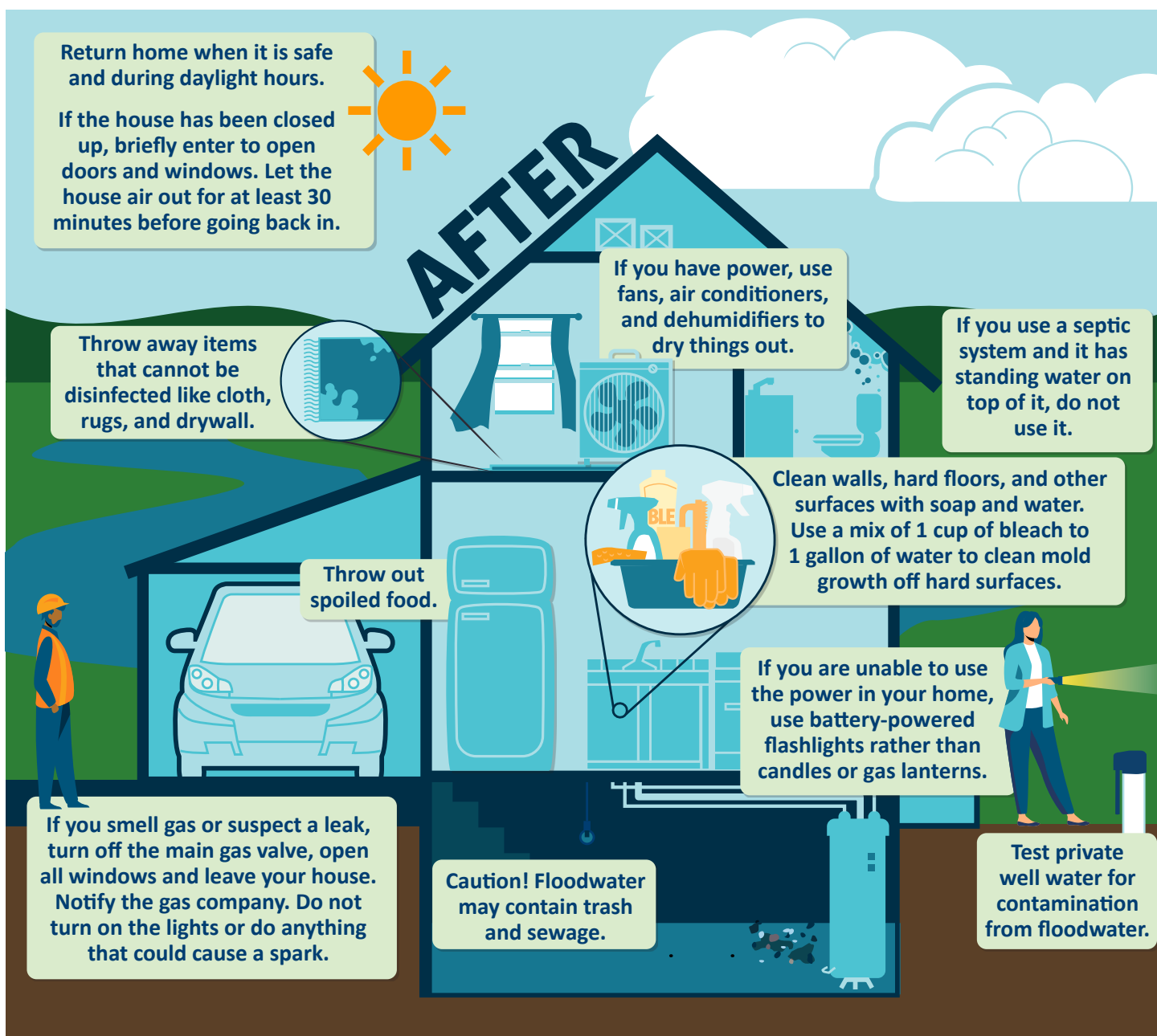
Those who rely on electricity to refrigerate medication or for medical equipment may also need help.



Returning home safely

Use caution when reentering a home or building that has been flooded. **Do not turn power on or off or use electric tools or appliances while standing in water. Have an electrician check the house's electrical system before turning the power on again.** Before reentering your home:

1. **Make sure the house is safe.** Is the house stable? Is the power off? How might the house be contaminated with chemicals or dirty water? Is the gas off?
2. **Make a plan.** How will you avoid potential hazards? Did water get into the heating and cooling system? Do you have personal protective equipment?
3. **Remove water, debris, trash, and items that have been damaged beyond repair.** Throw away items that cannot be dried quickly, like mattresses, carpeting, pillows, and upholstered furniture.



A flooded home needs to be cleaned up safely

Mold is common in houses that have been flooded. Mold can grow when water gets trapped in buildings and houses. If the home has been wet for more than 24 hours, assume mold is present even if you cannot see it.

Mold can affect indoor air quality and make you sick. It can cause a stuffy nose, sore throat, coughing or wheezing, burning eyes, or skin rashes. Some people, especially those with asthma or mold allergies, may have severe reactions.

In addition to mold, standing water after a flood could be contaminated by sewage or dangerous chemicals. Polluted water may have backed up into the house from flooded sewers and may contain bacteria, viruses or parasites. Learn more about mold at MDHHS's [All About Mold webpage](https://bit.ly/MDHHS_Mold) (URL: https://bit.ly/MDHHS_Mold).

To clean up safely, wear the proper gear and use appropriate cleaning products. Regular, unscented bleach, soap, and clean water can be used to clean and sanitize food cans, toys, and many kinds of surfaces. You can also use bleach and water to kill mold. Follow CDC's guidance on how much bleach to use for different surfaces at the page on [Household Cleaning and Sanitation](https://bit.ly/CDC-Sanitizing-with-Bleach) (URL: bit.ly/CDC-Sanitizing-with-Bleach).

For more information on cleaning and sanitizing after an emergency, visit the CDC page on [Hygiene in an Emergency](https://bit.ly/CDC-hygiene) (URL: bit.ly/CDC-hygiene) and [Clean Up Safely After a Disaster](https://cdc.gov/disasters/cleanup/facts.html) (URL: cdc.gov/disasters/cleanup/facts.html).

What to wear while cleaning up after a flood:

- N-95 respirator
- Protective gloves
- Goggles or eye protection
- Long-sleeved shirt
- Long pants
- Waterproof boots



Who should not enter a home with mold damage?

- Children.
- People with asthma or other breathing problems.
- People with weakened immune systems.

Extreme weather events affect mental health

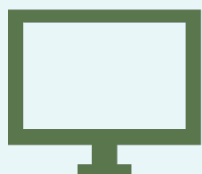


Extreme weather events can affect mental health among people who are at risk as well as people with no history of mental illness. Mental health impacts, such as anxiety, depression, or post-traumatic stress can last for a short time or continue for months or years after a flood. For more information, check out the CDC's page on [Coping with a Disaster or Traumatic Event](https://emergency.cdc.gov/coping/index.asp) (URL: emergency.cdc.gov/coping/index.asp) and the American Psychiatric Association's [How Extreme Weather Events Affect Mental Health](https://bit.ly/APA-Weather) (URL: bit.ly/APA-Weather).

Know your state, local, and federal resources

[Local Weather Forecast Offices](#) (WFOs) (URL: weather.gov/srh/nws/offices) of the [National Weather Service](#) (URL: weather.gov) issue advisories and warnings.

Stay Informed



Flood Advisory: Be Aware. Issued when flooding is expected to cause inconvenience, but not expected to be threatening to life or property. Could be minor flooding of low-lying areas and streets.

Flood Watch: Be Prepared. Issued when conditions are favorable for rapid flooding. It means it is possible that flooding will occur.

Flood Warning: Take Action! Issued when flooding is occurring or imminent.

Flash Flood Warning: Take Action! Issued when a flash flood is occurring or imminent. If you live in a flood prone area, move to higher ground. A flash flood is a sudden, violent flood and may even occur in areas not receiving rain.

Get alerts

- Learn about your community's emergency plans, warning signals, evacuation routes, and locations of emergency shelters. Visit [211-Michigan](#) (URL: mi211.org) or call your Local Health Department to find out more about emergency planning in your area.

Explore Michigan data

- Visit the [MiTracking Program site](#) (URL: michigan.gov/mitracking) and select the "Explore Data" button for Michigan data on how precipitation (e.g., rain, snow) is changing. For precipitation data, select the "Environment" category, "Climate Change" content area, and "Extreme Precipitation" indicator.
- Visit the [Michigan Climate and Health Adaptation Program \(MICHAP\)](#) (URL: michigan.gov/climateandhealth) to find more about how extreme weather events like flooding can impact human health.

More resources

- [Coping with Disaster](#) (URL: mhanational.org/coping-disaster).
- [Michigan State Police MIREADY Program](#) (URL: michigan.gov/miready).
- [Michigan Prepares: Floods](#) (URL: michigan.gov/michiganprepares/be-informed/floods).
- [Septic Systems: Hurricanes and Flooding](#) (URL: bit.ly/NEHA-Septic).

References

1. NOAA National Centers for Environmental Information. (2022). *State Climate Summaries-Michigan*. Retrieved from <https://statesummaries.ncics.org/chapter/mi/>.
2. CDC. (2021). *Flood Safety Tips*. Retrieved from <https://www.cdc.gov/nceh/features/flood-safety/index.html>.

Prepared by the [Michigan Climate and Health Adaptation Program \(MICHAP\)](#)

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