STAYING SAFE AFTER A FLOOD



Floods can create conditions that are harmful to both your physical and mental health. This fact sheet explains health risks 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: bit.ly/Prepare-Floods)
- <u>Staying Safe During a Flood</u> (URL: bit.ly/During-Floods)

Flood-related Hazard	Floodwaters	Damaged or flooded drinking water source	Power outages
Common threats to health and safety after a flood	 Hidden dangers, such as human and animal waste, trash, toxic chemicals, hazardous waste, downed power lines, and other debris. Drowning when trying to walk or swim through floodwaters. Flooded roadways cause car crashes or sweep cars away. 	 Contamination from damaged public water supplies and private residential wells. Polluted drinking water supplies that cause diarrhea and other kinds of sickness. 	 Carbon monoxide poisoning from improper generator use.
What to do to stay safe	 Stay out of floodwaters. If you must 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. Visit <u>MDHHS</u> <u>Water Testing</u> for more information about testing in Michigan (URL: bit.ly/MDHHSWaterTest). Follow guidance at <u>Disinfecting</u> <u>Wells After a Disaster</u>. (URL: cdc.gov/water-emergency). If on city water, check for boil water advisories. Do not drink floodwater, or use it to wash dishes, brush teeth, or wash and prepare food. Drink clean, safe 	 Never use a generator inside your home or garage. Generators should be at least 20 feet from any door, window, or vent.



Help Others

water.

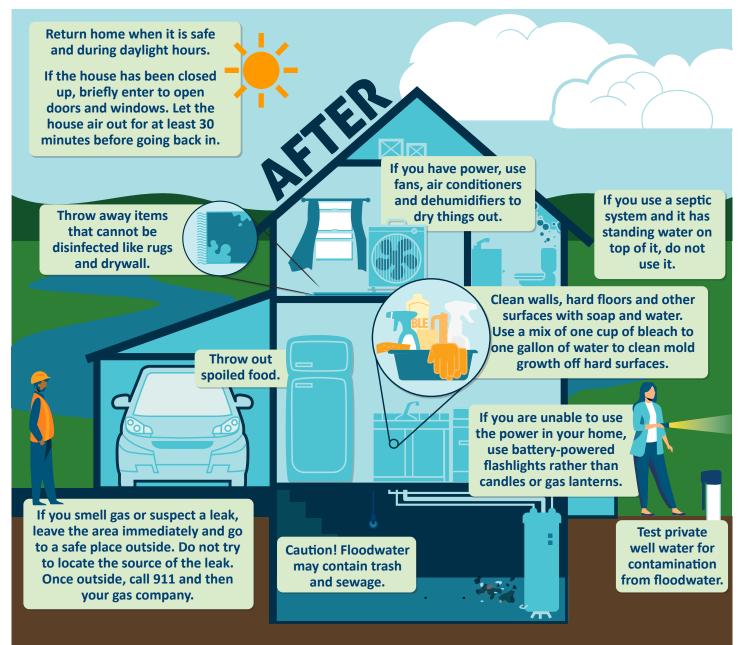
Check in on elderly neighbors and people that may need help cleaning up. Those who rely on electricity to refrigerate medication or for medical equipment may also need help.



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 a plan for reentering the house and what to prioritize. How will you avoid potential hazards? Did water get into the heating and cooling system? Do you have clothing that will protect you, such as rubber boots, a long-sleeved shirt, long pants, eye protection and an N95 mask?
- 2. Make sure the house is safe. Is the house stable? Is the power off? Is the gas off? How might the house be contaminated with chemicals or dirty water? Has a drinking water advisory been issued?
- 3. Remove water, debris, trash and items that are damaged beyond repair. Throw away items that cannot be disinfected with bleach and 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 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. Learn more about mold at MDHHS's <u>All About Mold webpage</u> (URL: Michigan.gov/Mold).

Also, be aware that sewage or dangerous chemicals could be in standing water after a flood. Polluted water may have backed up into the house from flooded sewers and may contain bacteria, viruses, or parasites.

To clean up safely, wear the proper gear and use appropriate cleaning products. Use regular, unscented bleach, soap and clean water to clean and sanitize undamaged food cans (free of punctures and dents), toys,

and hard surfaces, such as countertops and dishes.

You can also use bleach and water to kill mold. Follow the CDC's guidance on how much bleach to use for different surfaces at the page on <u>Household Cleaning and</u> <u>Sanitation</u>

(URL: cdc.gov/water-emergency). Make sure there is good ventilation when cleaning with bleach.

For more information on cleaning and sanitizing after an emergency, visit the CDC page on <u>Hygiene in an Emergency</u> (URL: bit.ly/CDC-Personal-Hygiene) and <u>Clean Up Safely After a Disaster</u> (URL: CDC.gov/natural-disasters/safety/).

Never mix bleach and ammonia. Serious injury or death may occur. Keep cleaning materials away from children and pets.

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 the mental health of people with preexisting conditions, as well as people without any history of mental health conditions. Mental health impacts, such as anxiety, depression or posttraumatic stress, can last for a brief time or continue for months or years after a flood. For more information, check out the CDC's page on <u>Coping with a Disaster or Traumatic</u> <u>Event (URL: bit.ly/Coping-Factsheet) and the American</u> Psychiatric Association's <u>How Extreme Weather Events</u> <u>Affect Mental Health</u> (URL: bit.ly/APA-Weather).

Know your state, local and federal resources

Local Weather Forecast Offices (WFOs) (URL: Weather.gov/srh/nwsoffices) of the <u>National Weather Service</u> (URL: Weather.gov) issue advisories and warnings.



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 <u>211-Michigan</u> (URL: Mi211.org) or call your local health department to find out more about emergency planning in your area.

Explore Michigan data

- Visit the <u>MiTracking Program site</u> (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 <u>Michigan Climate and Health Adaptation Program (MICHAP)</u> (URL: Michigan.gov/ climateandhealth) to find more about how extreme weather events like flooding can impact human health.

More resources

- <u>Coping with Disaster</u> (URL: Mhanational.org/coping-disaster).
- Michigan State Police MIREADY Program (URL: Michigan.gov/miready).
- Michigan Prepares: Floods (URL: Michigan.gov/michiganprepares/be-informed/floods).
- <u>Septic Systems: Hurricanes and Flooding</u> (URL: neha.org/flooding-guidance).

References

- 1. NOAA National Centers for Environmental Information. (2022). *State Climate Summaries-Michigan*. Retrieved from <u>https://statesummaries.ncics.org/chapter/mi/</u>.
- 2. CDC. (n.d.). Floods and Your Safety. https://www.cdc.gov/floods/about/.

Questions about this fact sheet? Call 800-648-6942.

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