

STAY SAFE DURING A FLOOD



Climate change is increasing the risk of flooding in Michigan. Heavy rainstorms are becoming more common, and annual precipitation (snow, rain, ice) is likely to increase.¹ This fact sheet explains some of the health risks associated with flooding. It also suggests ways you can protect yourself and your family during a flood.

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

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

Avoid floodwaters to protect yourself and your family from injury and sickness

Moving floodwater is a risk for everyone. Six inches of moving water can make you fall. A foot of water will float many cars.

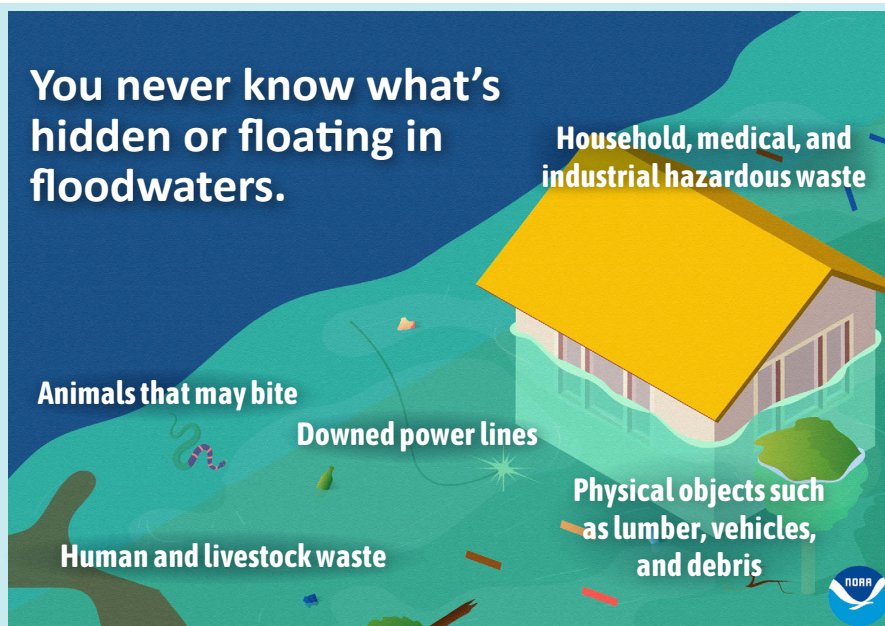
Every year, more deaths occur because of flooding than any other hazard related to thunderstorms.² Floodwaters are dangerous even to people who know how to swim well, and shallow standing water is dangerous for small children.

In addition to drowning, exposure to floodwaters can cause:

- Wound infections and skin rashes.
- Tetanus.
- Gastrointestinal illnesses and diarrheal diseases such as E. coli and Salmonella.
- Animal and insect bites.



You never know what's hidden or floating in floodwaters.

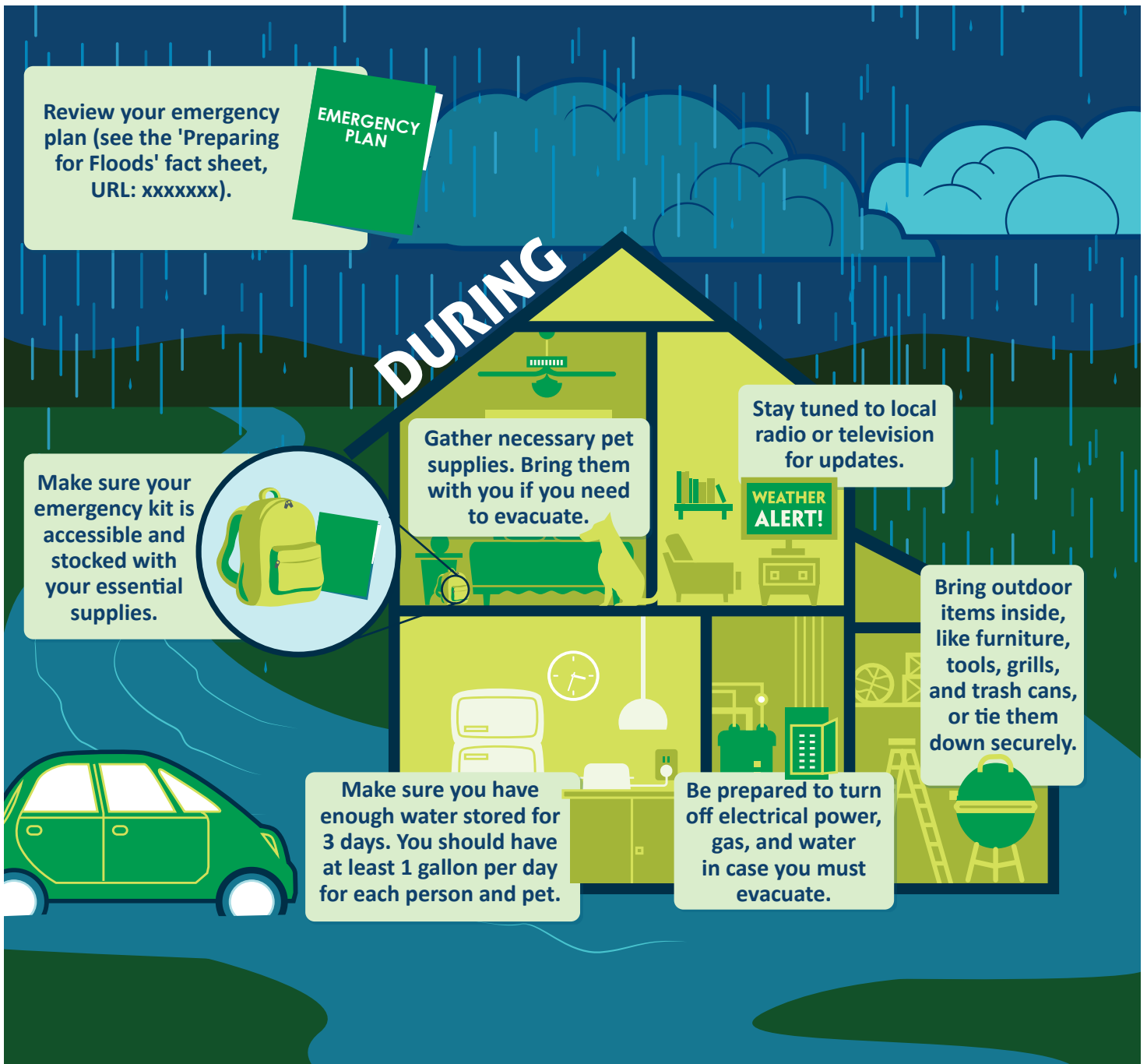


Floodwaters or standing waters contain many things that may harm you.

Learn more about possible hazards at the following Center for Disease Control's (CDC) webpages:

- [Chemical hazards](https://www.cdc.gov/Disasters/Chemicals.html) (URL: CDC.gov/Disasters/Chemicals.html)
- [Electrical hazards](https://www.cdc.gov/Disasters/Electrical.html) (URL: CDC.gov/Disasters/Electrical.html)

What to do during a Flood Watch or Flood Warning



- Take only essential items with you.
- Turn off gas, electricity, and water at main switches or valves.
- Disconnect appliances to prevent electrical shock when power is restored.
- Follow designated evacuation routes and expect heavy traffic.
- Do not drive or walk into flooded areas.

Help Others

Remember to plan for pets and offer extra support to people who need it. Also, if you need help, let others know.



Check in on elderly or disabled neighbors and make sure they have an evacuation plan.



Bring pets with you if you need to evacuate.



Keep children informed about the possibility of evacuating. Involve them in gathering supplies.

**WHEN
FLOODED
TURN AROUND
DON'T
DROWN**

Steer clear of flooded roadways.

Most deaths during floods occur because people try to drive through flood waters.

If you encounter floodwaters on roadways, do not drive through them. Six inches of water is enough to cause you to lose control of your car.²

For more information, check the CDC's page on [Floodwater After a Disaster](https://www.cdc.gov/floodwater-safety/) (URL: bit.ly/CDC-FloodwaterSafety).

Know your state, local, and federal resources

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

Stay Informed



Flood Advisory: Be Aware. Issued when flooding is not expected to be so dangerous that it needs a Warning. But, it may cause inconvenience and, if not treated with caution, lead to injury or property damage.

Flood Watch: Be Prepared. Issued when conditions are favorable for 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](https://mi211.org) (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](https://bit.ly/MI-Tracking) (URL: bit.ly/MI-Tracking) and select the "Go to the 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 \(MICHAP\)](https://michigan.gov/climateandhealth) (URL: michigan.gov/climateandhealth) to find more about how extreme weather events like flooding can impact human health.

More resources

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

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