

# COMMUNITY HEALTH CONNECTION

"A thriving Dubuque County where all people and the environment are healthy, safe, and valued."

## WHEN WEATHER *threatens*

When faced with threatening weather, we can take steps to keep ourselves and one another safe and healthy. When weather strikes, your trusted Emergency Management, Public Health, and Law Enforcement teams work together with your Municipal Officials to minimize injuries, prevent disease and illness, and ensure the safest living conditions for your community.

### *Preparation is Key*

- Learn which weather events are likely in your area. In the summertime, Iowa may experience severe thunderstorms, tornadoes, floods, excessive heat, or wildfire smoke.
- Make a plan and ensure everyone in your family knows the drill.
- Check on neighbors, friends, and family, especially those at increased risk including children, older adults, and people with disabilities or chronic health conditions.
- Build a kit with supplies to sustain your family and pets for 3-5 days.
- Learn about the severe weather warning system in your area and tune in to your local radio and TV stations, a NOAA weather radio, or internet for up to date information and instructions.
- Stay informed! Your smart can and should alert you! Sign up for **Alert Iowa**, a free emergency notification service to receive time-sensitive local news such as weather, public safety and health advisories. To opt-in, simply text DUBUQUEIA to 672-83, download the Smart911 App, or scan the QR Code. If you do not have internet or need assistance, call Dubuque County EMA at (563)589-4170 or Public Health at (563)557-7396.



# Safety During the Storm

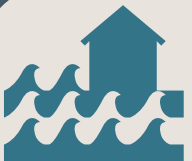
Some severe weather safety tips are well known, but other important things you may not have considered could save your life when weather threatens. Here are some lesser-known, but important suggestions to keep in mind.



- Avoid contact with electrical equipment such as telephones and TVs.
- Avoid contact with plumbing. Do not take a shower, wash dishes, etc.
- Stay away from windows or doors, stay off porches.
- Stay tuned to your local radio and TV stations, a NOAA weather radio, or internet.
- Be aware of less obvious dangers such as falling trees and large hailstones.



- You may not have much time to seek shelter, when advised, seek shelter IMMEDIATELY in a storm cellar, basement, or inside room without windows on the lowest floor. Get under something sturdy and cover your head.
- Stay tuned to your local radio and TV stations, a NOAA weather radio, or internet.
- Don't rely only on tornado sirens as they aren't designed to be heard indoors.



- If flash flooding occurs, move immediately to higher ground.
- NEVER drive through a flooded road.
- Avoid contact with electrical equipment such as telephones and TVs.
- Stay tuned to your local radio and TV stations, a NOAA weather radio, or internet.



- Stay hydrated by drinking plenty of fluids, even if you don't feel thirsty.
- If possible, avoid being outdoors during the hottest part of the day (10a-2p).
- If you must be outdoors, dress in light, loose clothing and take frequent breaks.
- Recognize the signs of heat exhaustion & heat stroke and how to respond.
- Know your risk! Some medications lead to increased risk for heat stroke.



- When possible, remain indoors with windows and doors closed.
- If you must be outdoors, keep it brief, and use a disposable tight-fitting mask. Contact your local public health department for masks at (563)557-7396.
- Consider changing your A/C filter often or run a portable HEPA filter.

# Hazards After a Storm

The storm is over, but that doesn't mean the danger is. Hidden dangers can remain even after a storm has passed. Too often, weather-related injuries are suffered during rescue and recovery attempts. Knowing what to do in the wake of a severe storm or disaster may be just as important to your family and community as proper preparation. Keep yourself and loved ones safe after the storm by following these safety tips.



Avoid moving water! If you must come in contact with floodwater, wash or sanitize your hands. Floodwater can contain many things that may be harmful, including germs, chemicals, livestock waste, stray animals, downed powerlines, and other contaminants that can make you sick.



Use caution near damaged buildings! Do not enter a damaged building until local authorities determine it is safe. Leave your home if you hear strange or unusual noises which could mean the building is about to collapse.



Stay clear of fallen power lines! Call 911 or the electric company. Never use a wet electrical device. If the power is out, use flashlights instead of candles. Keep a fire extinguisher handy and make sure that everyone in your family knows how to use it.



Consume ONLY safe food and water! Throw away perishable foods that have not been refrigerated properly or have come in contact with flood water. Tap water may not be safe to drink. Be aware of boil advisories. If you have a private well, please see pages 4 and 5 of this newsletter for important safety information.



Prevent mold growth! Clean up and dry your home quickly after the storm or flood ends - within 24-28 hours. Air out your house by opening windows and doors. Use fans to dry wet areas. Discard any drywall and insulation that has been contaminated with floodwater. Thoroughly clean all wet surfaces with hot, soapy water and a bleach solution of 1 cup per 1 gallon of water. Always follow safety guidelines when using bleach!



Prevent carbon monoxide poisoning! Fuel-burning equipment creates carbon monoxide. This can include equipment like generators, pressure washers, charcoal grills, and camp stoves. You can't see or smell carbon monoxide, but if it builds up in your home, it can cause sudden illness or death. Never use fuel-burning equipment in your home, basement, or garage. Consider using a battery-operated carbon monoxide detector.



Seek disaster assistance! Notify your homeowners insurance company or an agent as soon as possible. The company will ask questions such as the type of storm, the date and time, and summary of damage. Voluntary resources such as the Red Cross, The Salvation Army and your local Community Organizations Active in Disasters can provide critical assistance. Learn about Disaster Proclamations that may have been activated by the Governor.



# Well Flooding Guidance

Wells located in areas that have been flooded or wells with sources influenced by flood waters should view this guidance. **In general, wells should be inspected, disinfected, and sampled after flooding and prior to being used.**

## Steps to Take following Flooding

- Do not drink or use the well water until the water is proven safe.
- Switch to an alternate water source, such as bottled water for drinking, brushing teeth, cooking, etc., until your well is proven safe.
- If no alternate water source is available, and the well water is clear, boil it for a minimum of 1 minute to remove bacteria, protozoa, and viruses. Note that boiling water can increase concentrations of inorganic chemicals such as nitrates. Do not boil and consume muddy, discolored, or sediment laden water.
- Muddy or discolored water means your well has been influenced by surface water or flood waters. Run a hose from an outside spigot until it runs clear and free of sediment.
- Contact your [local county health department](#) to sample your well for bacteria and nitrates.
- Contact a [certified well contractor](#) to perform a well assessment and disinfection of the well system.
- DO NOT attempt to repair the pump or any electrical parts on your own, especially during flooding. This must be done by a certified well contractor and there are large electrocution risks associated with well pumps.
- If you are in a water emergency and you cannot get in touch with a certified well contractor, you can perform **emergency shock chlorination**.



Image source: <https://investigatemidwest.org/2019/06/09/sw-iowa-flood-adds-to-safe-drinking-water-challenges/>

## Emergency Shock Chlorination

See page 2 for directions on measuring and mixing bleach for your well.

1. Run the well water from a hose away from the well until it's the water is clear.
2. Turn off all electricity to the well. Call a professional if needed.
3. Remove the well cap or seal and use the funnel or the bucket to pour the bleach mixture down the well (see table on back for bleach mixing instructions)
4. Run a hose from an outside spigot into the well casing (where you added bleach).
5. Turn on the spigot and wait until you start to smell bleach coming from the hose.
6. Coat all sides of the interior well casing with the bleach water, then shut off the hose spigot.
7. If you have water treatment system, turn on the bypass valve. Do not run bleach water through your treatment system.
8. Turn on all interior and exterior COLD water faucets until the chlorine smell can be detected coming from all faucets.
9. Immediately shut off all faucets and wait at least 12 hours before turning the faucets back on. Do not turn on or consume any water during that time.
10. After the waiting period, turn on all cold water faucets and run until chlorine is no longer detected.
11. Have the water tested as soon as possible to determine if the water is safe.

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IOWA DEPARTMENT OF  
NATURAL RESOURCES

# Well Flooding Guidance

Proper disinfection requires bleach concentrations 100 mg/L or greater and a minimum of 12 hours contact time with the whole water system. The tables below show amount of bleach needed based on your well diameter and water column depth. If you do not know the depth of your well and the depth to your water, you cannot calculate the correct amount. In that case, please contact a [certified well contractor](#) to perform the work. These concentrations require a minimum 12 hour contact time. Mix the amounts below into a 5 gallon bucket with clean water, then use the procedure stated on page 1. You will need a 5 gallon bucket, hose, outside spigot, wrench, latex gloves, and eye protection.

## Dug or Bored Well

Depth of Water	Diameter of Well					
	0.5 foot	1 foot	2 feet	3 feet	4 feet	5 feet
10 feet	1/2 cup	1-3/4 cups	7 cups	1 gal	1-3/4 gal	2-3/4 gal
20 feet	1 cup	3-1/2 cups	14 cups	2 gal	3-1/2 gal	5-1/2 gal
30 feet	1-1/2 cups	5-1/4 cups	1-1/4 gal	3 gal	5-1/4 gal	8-1/4 gal
40 feet	2 cups	7 cups	1-3/4 gal	4 gal	7 gal	11 gal
50 feet	2-1/2 cups	8-3/4 cups	2-1/4 gal	5 gal	8-3/4 gal	13-3/4 gal

## Drilled or Sandpoint Well

Depth of Water	Diameter of Well Casing						
	2 inches	4 inches	6 inches	8 inches	10 inches	24 inches	36 inches
10 feet	3/4 tbsp	3-1/4 tbsp	1/2 cup	3/4 cup	1-1/4 cups	7 cups	1 gal
20 feet	1-1/2 tbsp	6-1/2 tbsp	1 cup	1-1/2 cups	2-1/2 cups	14 cups	2 gal
30 feet	2-1/4 tbsp	9-3/4 tbsp	1-1/2 cups	2-1/4 cups	3-3/4 cups	1-1/4 gal	3 gal
40 feet	3 tbsp	13 tbsp	2 cups	3 cups	5 cups	1-3/4 gal	4 gal
50 feet	3-3/4 tbsp	1 cup	2-1/2 cups	3-3/4 cups	6-1/4 cups	2-1/4 gal	5 gal
100 feet	7-1/2 tbsp	2 cups	5 cups	7-1/2 cups	12-1/2 cups	4-1/2 gal	10 gal

Source: <https://www.cdc.gov/healthywater/emergency/drinking/private-drinking-wells.html>