Summer Weather Safety

Summer brings many different types of weather to the Northern Plains of the United States. Some of the weather we see during this time of year is pleasant, but some of it can be downright dangerous. This edition of the Sky-scanner will focus primarily on how to keep yourself and your family safe during some of the more extreme and hazardous weather that may occur during the remainder of the summer months.
Flood Safety

Sometimes floods develop slowly and forecasters can anticipate where a flood will happen days or weeks before it occurs. Often times flash floods can occur within minutes and sometimes without any sign of rain. Being prepared can save your life and give you peace of mind. Here are some things to consider to help in your preparation.

Create a Communications Plan
Assemble an Emergency Kit
Know Your Risk
Sign up for Notifications

The Advanced Hydrologic Prediction Service provides RSS feeds for observed forecast and alert river conditions to help keep the public informed about local water conditions.

Prepare Your Home
Prepare Your Family/Pets
Charge Your Essential Electronics
Leave

For further information, see www.floodsafety.noaa.gov.
Before going boating, fishing, diving or enjoying other water sports, check the forecast from [weather.gov](http://weather.gov) or your favorite weather source.

- If severe weather is predicted, stay home or go earlier than normal. Be prepared to head to shore quickly. Monitor storms via:
  - [NOAA Weather Radio](https://www.weather.gov)
  - [Mobile.weather.gov](https://mobile.weather.gov)
  - Apps that have radar/lightning data
- If you are caught out in a storm and can't get back in time, here's what do to:
  - Divers should get out of the water and get to safety. If that is not possible, dive as deep as possible for the duration of the storm or as long as possible.
  - Stop all activities when there is lightning or when weather conditions look threatening. The first lightning strike can come out of a clear blue sky many miles ahead of an approaching thunder storm cloud.
  - If your boat has a cabin, stay in the center of the cabin. If you don't have a completely enclosed cabin, stay low.
  - Keep arms and legs in the boat. Do not dangle them in the water. Water conducts electricity from lightning.
  - Disconnect electronic equipment, including the radio, throughout the duration of the storm.
  - Lower, remove or tie down the radio antenna and other protruding devices if they are NOT part of a lightning protection system.
  - If someone is struck by lightning, perform CPR immediately if needed. Victims do not carry an electrical charge after being struck. There is no danger to you in offering emergency aide.
  - If a boat has been struck by lightning, or is suspected of having been struck, check the electrical system and the compasses to ensure that no damage has occurred.

Consider downloading the NWS mobile site at [mobile.weather.gov](http://mobile.weather.gov) or another weather app. Be sure your app offers forecasts and NWS watches, warnings and advisories. Some more advanced apps, offer radar data and lightning information, which can be vital for boaters caught out when the weather changes.
How to Respond to Excessive Heat Events

- Slow down: reduce, eliminate or reschedule strenuous activities until the coolest time of the day. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors.
- Dress for summer. Wear lightweight, loose fitting, light-colored clothing to reflect heat and sunlight.
- Eat light, cool, easy-to-digest foods such as fruit or salads.
- Drink plenty of water (not very cold), non-alcoholic and decaffeinated fluids, even if you don't feel thirsty. If you on a fluid restrictive diet or have a problem with fluid retention, consult a physician before increasing consumption of fluids.
- Use air conditioners or spend time in air-conditioned locations such as malls and libraries.
- Use portable electric fans to exhaust hot air from rooms or draw in cooler air.
- Do not direct the flow of portable electric fans toward yourself when room temperature is hotter than 90°F. The dry blowing air will dehydrate you faster, endangering your health.
- Minimize direct exposure to the sun. Sunburn reduces your body's ability to dissipate heat.
- Take a cool bath or shower.
- Do not take salt tablets unless specified by a physician.
- Check on older, sick, or frail people who may need help responding to the heat. Each year, dozens of children and untold numbers of pets left in parked vehicles die from hyperthermia. Keep your children, disabled adults, and pets safe during tumultuous heat waves.

For more heat health tips, go to the Centers for Disease Control and Prevention
Lightning Safety

Lightning: What You Need to Know

- **NO PLACE** outside is safe when thunderstorms are in the area!!
- If you hear thunder, lightning is close enough to strike you.
- When you hear thunder, *immediately* move to safe shelter: a substantial building with electricity or plumbing or an enclosed, metal-topped vehicle with windows up.

Stay in safe shelter at least 30 minutes after you hear the last sound of thunder.

Indoor Lightning Safety

- Stay off corded phones, computers and other electrical equipment that put you in direct contact with electricity.
- Avoid plumbing, including sinks, baths and faucets.
- Stay away from windows and doors, and stay off porches.

Do not lie on concrete floors, and do not lean against concrete walls.

Last Resort Outdoor Risk Reduction Tips

If you are caught outside *with no safe shelter anywhere nearby* the following actions *may* reduce your risk:

- Immediately get off elevated areas such as hills, mountain ridges or peaks
- Never lie flat on the ground
- Never shelter under an isolated tree
- Never use a cliff or rocky overhang for shelter
- Immediately get out and away from ponds, lakes and other bodies of water
- Stay away from objects that conduct electricity (barbed wire fences, power lines, windmills, etc.)
The Importance of Storm Reports

When thunderstorms develop across central and eastern South Dakota and west-central Minnesota, we rely on three main sources of information in order to make warning decisions: radar data, environmental data, and ground truth in the form of storm reports. While monitoring radar and the environment is done from inside our office, we depend entirely on outside sources for storm reports. As a result, trained spotters, emergency managers, law enforcement, and the general public among others are all very valuable to operations. Radar and environmental data yields a treasure trove of information that can provide enough justification for warning decisions in nearly all situations, but a storm report can calibrate or fine-tune thinking. This helps ensure the best possible service with longer lead times and more accurate warning information.

Not sure what’s worthy of a phone call or a Facebook post? Just remember we’d rather have information as opposed to not having it, even if the report doesn’t meet severe criteria (58 mph wind, 1.00” hail, or tornadoes). For example, if you see penny sized hail falling outside and decide to let your local Weather Service office know, we will compare the time and location of your report with radar data. If the storm intensifies, we have more confidence that severe hail will occur. For more on why, what and how to report, see the graphic below.

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**We LOVE Your Weather Reports!**

**WHY?**
- They help us verify our forecasts and warnings
- We can let neighboring towns know what’s headed their way
- Reports are archived for use in scientific research, which can lead to a better understanding of thunderstorms

**WHAT kind of reports?**
- Tornado, funnel cloud, OR rotating wall cloud
- Hail of any size: measure w/ ruler or compare to coin size
- High wind: estimated OR damage
- Flooding (beyond typical locations)

**HOW? As soon as safely possible:**
- Post a report on our Facebook page OR Tweet us a report by mentioning @NWSAberdeen in your tweet – pictures are always encouraged!
- Contact us via email at abrreports@noaa.gov or via our direct phone number at 1-800-697-1107
Three Month Outlooks—August through October

Temperature Outlook for August through October

Precipitation Outlook for August through October
Summer afternoon-summer afternoon; to me those have always been the two most beautiful words in the English language.

~ Henry James