



When thunder roars, go indoors.

#BeInformed



OPTIMISM BIAS – A WELL KNOWN PSYCHOLOGICAL PHENOMENON THAT CAUSES A PERSON TO BELIEVE THAT THEY ARE LESS AT RISK OF EXPERIENCING A NEGATIVE EVENT COMPARED TO OTHERS...

Severe Weather Preparedness and Response By Kellie Mataack

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DON'T BE FOOLED; PREPARE AND PREVENT,
DON'T REPAIR AND REPENT.

In the spring and summer, it is not unusual for Germany to experience an inflow of warm, humid air masses originating from the southwest. When these air masses converge with the colder air from the north, and there is adequate wind shear, they can trigger the self amplifying convection processes. This precipitates an enormous amount of energy to be released into the atmosphere, creating thunderstorms (severe convection storms) and supercells, bringing lightning, torrential rain, hurricane force winds, hail, and even tornados. This year alone, Europe has experienced over 1300 occurrences of severe damaging winds and microbursts, as well as 8 confirmed tornados and 64 suspected; one of which the confirmed, occurred just a mere 50km from the Grafenwohr area.

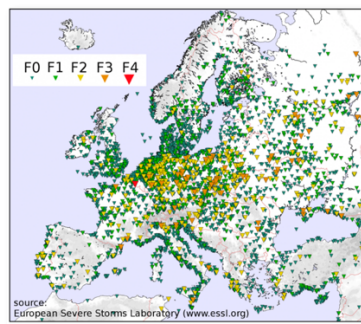
What are the effects?

In 2007, Germany experienced supercell Kyrill that resulted in 11 deaths and 2 billion euros in damage and in 2015, there was a series of 5 tornados on the evening of 5 May, that caused two death, left 30 injured, destroyed 16 homes, damaged more than 100 cars, and precipitated more than 30 million Euro in damages. Later that month, on 13 May, three tornados occurred in the Southern Germany, resulting in the destruction of 230 buildings and losses of more than 50 million euros. More recently, supercell Friederike, caused 1 billion euro in damages and took the lives of 8 individuals;

the second most expensive storm to strike in the last 20 years.

So now what?

So what does this mean for my family and I you ask? This means it is time to take action! The first step in preparedness is to know your risk, and the next step is to take action. You can do this by developing an emergency plan based on our local weather hazards and practice how and where to take shelter before a severe weather event! Be sure to include Fido! Next is to build an emergency supply kit and create a family communications plan. If you do not even know where to start, head to www.redcross.org or www.ready.gov to download templates, or navigate to www.2cr.army.mil, select "Sponsorship," then "Prepared Dragoons" for Quick Reference Guides specific to 2CR!



Emergency Alert Systems

The Host Nation has three warning notification systems; NINA, KATWARN, and WARNWETTER, all of which can be downloaded to the user's smartphone. USAG Bavaria has three Giant Voice Towers, two on Tower Barracks and one on Rose barracks, in which they can use to alert the public of imminent danger; they also utilize the MWNS ALERT!. The Host Nation also utilizes warning signals called the Civil Defense Sirens. The Warning of Imminent Danger will sound with a one Minute howl changing between upper and lower sounds; this is also known as the ABC Alarm. ABC occurs in the following situations: in case of an attack of atomic (nuclear) biological or chemical nature; extreme weather like storm; flooding; any other big catastrophe. When you here this alarm you must inform neighbors and non-German speakers in your area; get indoors; close windows and doors; shutdown central air or a/c; turn on your local TV or Radio station and wait for instructions/information. The all clear alarm will sound with a one minute long howl that will not change pitch or sounds. Residents may also here such alarms as the fire alarm and the general test. The fire alarm is a one minute howl with two breaks calling in the local volunteer fire department; while the General test is one short howl (1x 2 seconds long and 1x 12 seconds long).

Before a thunderstorm

- Remove dead or rotting trees and branches that could fall and cause injury or damage.
- Postpone outdoor activities.
- Secure outdoor objects that could blow away or cause damage.
- Shutter windows or close blinds, shades, or curtains and secure outside doors.
- Remain indoors 30 minutes before and after a thunderstorm.

During a thunderstorm avoid

- Showering or bathing: plumbing and bathroom fixtures can conduct electricity.
- Corded telephones; cordless and cellular telephones are safer.
- Power surges; unplug appliances and electrical items such as computers and turn off air conditioners.
- Natural lightning rods such as a tall, isolated tree in an open area.
- Hilltops, open fields, the beach, or a boat on the water.
- Isolated sheds or other small structures in open areas.
- Anything metal—tractors, farm equipment, motorcycles, golf carts, golf clubs, and bicycles.

If you are outside

Get inside a residence, building, or hard top automobile if possible.

- Seek shelter in a low area under a thick growth of small trees if in a forested area.
- Be aware of flash flooding.
- If you feel your hair stand on end (which indicates that lightning is about to strike):
- Squat low to the ground on the balls of your feet.
- Place your hands over your ears and your head between your knees.
- Make yourself the smallest target possible and minimize your contact with the ground.
- DO NOT lie flat on the ground.

Tornadoes

Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. They may strike quickly and with little or no warning. Tornado season is May to September with July having the most recorded tornadoes. Although tornadoes are rare in Bavaria, they can still occur.

Before a tornado

- Look for the following danger signs:
- Dark, often greenish sky
- Large hail
- A large, dark, low-lying cloud (particularly if rotating)
- Loud roar, similar to a freight train
- Be prepared to take shelter immediately.

If you are in a structure

- Go to a pre-designated shelter area such as a safe room, basement, storm cellar, or the lowest building level.
- Go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls if there is no basement.
- Put as many walls as possible between you and the outside.
- Get under a sturdy table and use your arms to protect your head and neck.
- Do not open windows.

If you are in a vehicle, trailer, or mobile home

- Get out immediately and go to the lowest floor of a sturdy, nearby building, or a storm shelter.
- Mobile homes, even if tied down, offer little protection from tornadoes.

If you are outside without shelter

- Never try to outrun a tornado. As soon as you are alerted to an emergency in your area, follow these steps and be prepared to leave immediately:
- Lie flat in a nearby ditch or depression and cover your head with your hands.
- Do not get under an overpass or bridge because these structures can intensify the wind.
- Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.

Tornado Safety Tips

Practice and Prepare

Know where you'll meet your family during the tornado (and after). Practice a tornado drill annually. Keep a weather radio in your storm shelter, along with safety supplies.

Seek Shelter

Go to your basement, a small interior room, or under stairs on the lowest floor of the house. If you live in a mobile home, get out and look for a stable building. If outside, find low ground—away from trees and cars—and lie face down with your arms protecting your head.

After the Storm

Stay away from downed power lines, and avoid flooded areas—power lines could be submerged and still live with electricity. Don't enter seriously damaged buildings and avoid using matches and lighters in case of gas leaks.






Know the Signs

- Look for swirling clouds.
- Watch for quick wind shifts or stark calm after heavy rain.
- Listen for a loud roar or rumble that doesn't fade.

Source: National Oceanic and Atmospheric Administration and Funnel, Inc.

While a tornado in Germany is rare, downbursts and micro/macrobursts are becoming more common. Before, during and after actions remain the same.

Understanding Severe Weather Hazards

 Tornado	Tornadoes are violently rotating columns of air that can destroy buildings and cause significant injury or death ACTION: Take shelter immediately in a sturdy structure
 Large Hail	Hail can damage vehicles, crops, buildings, and cause injuries ACTION: Move indoors away from windows
 Strong Wind	Strong wind can knock over trees and damage buildings ACTION: Move indoors away from windows
 Heavy Rain	Heavy rain can cause flash flooding ACTION: Avoid rising creeks and water-covered roads
 Lightning	Lightning strikes can cause significant injury or death ACTION: Move indoors if you hear thunder

Deutscher Wetterdienst

The Deutscher Wetterdienst serves all of Germany. They provide forecasts, warnings, and other meteorological information to the general public, media, emergency management and law enforcement officials, the aviation community, and other customers. Serving as the nerve center for official government weather services across Germany the staff at the DWD ensures the delivery of timely information on critical weather.

German Weather Resources

- www.unwtteralarm.com
- www.tornadoliste.de
- www.meteoalarm.eu
- www.eswd.eu

