



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...

Extreme Heat Preparedness and Response By Kellie Mataack

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

In the summer of 2003, Europe experienced temperatures twenty to thirty percent higher than the seasonal average; extreme maximum temperatures of 35 to 40°C were recorded in July and continued into August. This extreme weather was the cause of an anti-cyclone that had firmly anchored itself over the western European land mass; resulting in the impeding of life-giving rain-bearing depressions that usually enter the continent from the Atlantic Ocean. In the United Kingdom, temperatures rose to with 38.1°C, while France experienced 40 °C; Switzerland, 41.5 °C; and Germany, 35 to 40°C.

What were the effects?

2003 was the year Europe experienced its highest death toll from natural hazards in the past 50 years and was one of the ten deadliest natural disasters in Europe for the last 100 years. This heat wave had deleterious effects; not only did over 30,000 individuals perished, but the heat precipitated massive forest fires, a reduction in vegetation growth by thirty percent, and ultimately cost the continent an estimated US\$10 billion, with the global financial impact of drought and forest fires exceed 13 billion Euro. This estimation includes life insurance payments for heat wave and wildfire deaths; property damage and direct health costs, including hospital stays, clinic treatments, and ambulance rides; livestock and crop damages; fire and timber losses; and hydroelectric power restrictions (wherein

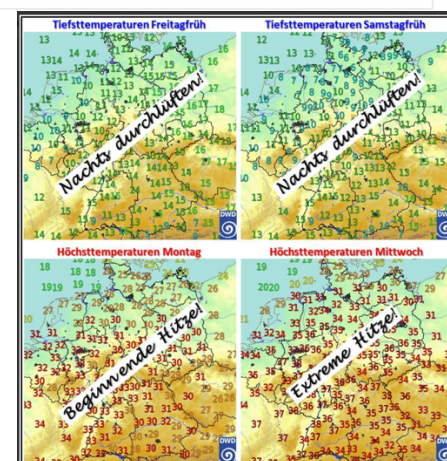
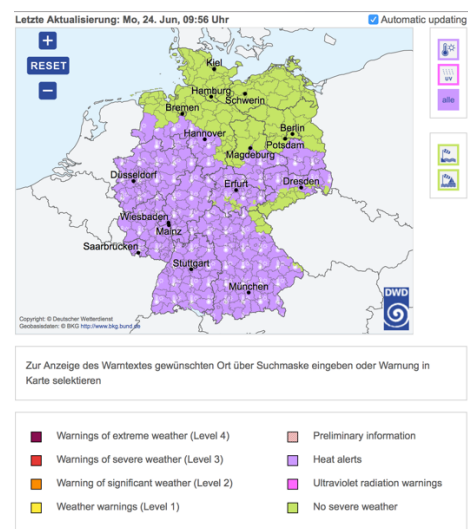
electricity prices rose above 100 Euros/MWh).

So What?

When one thinks of disasters and the vulnerability of the loss of human life; heat is one of the last scenarios that typically comes to mind; and with the DWD anticipating temperatures to rise to as high as 40°C, lasting through the weekend it is imperative that one prepare. While the current forecast is not purporting the heatwave to last as long as in 2003; it is expected to be similar to that of 2018, where heat related deaths in Germany increased by ten percent, hospital admissions increased by five percent, and the economic impact resulted in a reported loss of 5.2 billion Euros.

Germany defines extreme heat as temperatures above 35 °C.

How does one prepare for and respond to extreme heat? Heat kills by pushing the human body beyond its limits. Most heat-related illnesses or deaths occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat. Stay in the know by downloading the WarnWetter App, NINA, KATWARN, and following the Garrison official Facebook page.



Before extreme heat

- To keep cool air inside, ensure weather stripping on doors and sills is in good condition.
- Cover windows that receive morning or afternoon sun with drapes, shades or awnings.
- Install air conditioners, gaps, windows, door frames, window and door sills.
- Install window air conditioners snugly; insulate if necessary.
- Check air-conditioning ducts for proper insulation.
- Install temporary window reflectors (position between windows and drapes), such as aluminum foil-covered cardboard, to reflect heat back outside.
- Cover windows that receive morning or afternoon sun with drapes, shades, awnings or louvers. Outdoor awnings or louvers can reduce the heat that enters a home by up to 80%.
- Keep storm windows installed all year.

During a heat emergency

- Stay indoors as much as possible and limit exposure to the sun.
- Stay on the lowest floor out of the sunshine if air conditioning is not available.
- Consider spending the warmest part of the day in public buildings such as libraries, schools, movie theaters, shopping malls, and other community facilities.
- Drink plenty of water and limit intake of alcoholic beverages to prevent dehydration.
- Dress in loose-fitting, lightweight, and light-colored clothes that cover as much skin as possible.
- Protect your face and head by wearing a wide-brimmed hat.
- Avoid strenuous work during the warmest part of the day.
- Check on family, friends, and neighbors who do not have air conditioning and are frequently alone.
- Never leave children or pets alone in closed vehicles.

Hitze-Entwicklung im geschlossenen Auto: Kinder & Hunde bei Hitze nie im Auto lassen!

Außen-temperatur	5 Minuten	Innentemperatur nach 10 Minuten	30 Minuten	60 Minuten
20°	24°	27°	36°	46°
22°	26°	29°	38°	48°
24°	28°	31°	40°	50°
26°	30°	33°	42°	52°
28°	32°	35°	44°	54°
30°	34°	37°	46°	56°
32°	36°	39°	48°	58°
34°	38°	41°	50°	60°
36°	40°	43°	52°	62°
38°	42°	45°	54°	64°
40°	44°	47°	56°	68°

So schnell werden die Temperaturen lebensgefährlich: Temperaturen in einem grauen PKW nach 5 bis 60 Minuten in der Sonne (orange: Lebensgefahr).

© Quelle und vollständiger Artikel: <http://www.illipuk-lounge.de/hitzefalle>

Understanding heat

Air temperature

During high heat, the air temperature and other environmental factors are more severe, which greatly increases the risk of heat related illness. Cal/OSHA defines high heat when the air temperature is equal to or exceeds 95° F. High heat can be worse in low-lying regions like valleys and depressions, where stagnant atmospheric conditions trap the lower layer of hot air preventing air circulation.

Relative humidity

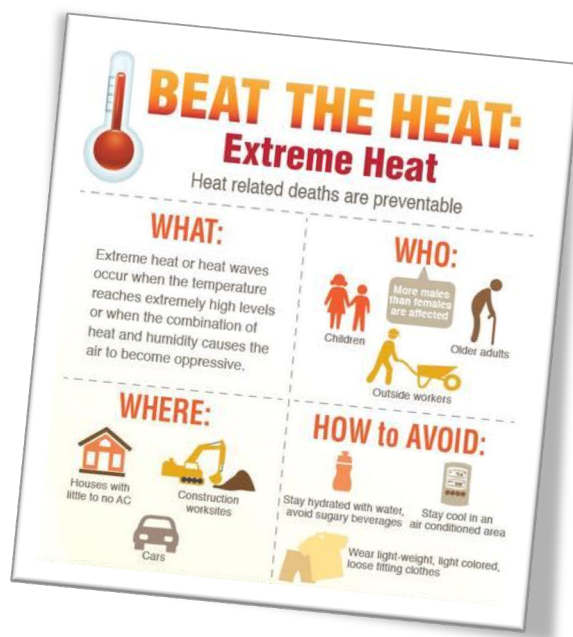
High heat may also be accompanied by high humidity. When there is high humidity, sweat does not readily evaporate off of the skin. This greatly slows the body's natural processes of releasing heat to the surrounding environment causing the body to quickly overheat. Radiant heat from the sun and other sources: The body may gain heat from radiant heat sources if the body is cooler than the radiant heat source and may lose heat if the body is hotter than the radiant heat source(s). Thus, providing shade helps the body to cool from radiant heat sources like the sun. Conductive heat sources such as the ground: Since conduction is another way heat may be transferred to and from the body, being in contact with a hot surface such as sitting on the hot ground (or chair that has been sitting in the sun) during a rest break may limit the body's ability to cool.

Air movement

Air movement can also cause heat to be transferred to and from the body (i.e., convection). Air flowing past the body can cool the body only if the air temperature is cooler than about 95°F. If the temperature is hotter than 95° F, the body can gain heat by hot air flowing past the body. This is why the use of fans is not an effective cooling measuring when the air temperature is hotter than about 95°F.

Workload severity and duration

Strenuous work causes the body to heat up and is a major source of heat gain for the body. Therefore, employees performing strenuous work in the heat need more frequent breaks than other employees performing less strenuous work in the heat, all else being equal. If done correctly, acclimation can typically take 5-7 days, but can also take weeks. Each individual acclimates at a different rate, as different variables are present.



During a heat wave some cooling Centers may be opened in order to reduce the effects of the extreme heat. If cooling centers are opened, personnel will be notified through their command, Garrison PAO, and AtHoc notifications.

USAG Bavaria AC enabled facilities

Tower Barracks Commissary
Vilseck Commissary
Vilseck Health Clinic
Tower Barracks Health Clinic
Tower Barracks Gymnasium

