Am I hot or not?

It was the summer of 1981 and I was a newly enlisted U.S. Army Military Police soldier. My basic combat training took place just outside Anniston, Ala., at a now retired Army base known as Ft. McClellan. It was above 100°F every single day for weeks straight, and that's not even counting the "heat index" that we use today. Day after day, we experienced heat like most of us had never even imagined. I am a Florida boy, so I was mostly acclimated, and besides, we were tough guys. We



weren't going to let the conditions beat us, and even if they did, we certainly were not going to admit it. Not to anyone. Not ever.

But we had this hill that we called Bain's Gap. It had a road over the top which was about a 20-percent grade, or as we used to say "uphill both ways." It was littered with WWI UXO (World War I UneXploded Ordnance); some more of it was found as recently as 2010. Ft. McClellan froze in winter and was a kiln in summer; it was a perfect training ground and opportunity for weather-related injuries.

One day in July that year, we had a combat forced road march, otherwise known as a long hike (about 25 miles) at a fast pace, carrying about 100 pounds of gear and wearing a full-body chemical protective suit known as MOPP gear. I was walking point and I was carrying an M60 machine gun, which we called the "pig" because it weighed 23 pounds and consumed so many bullets you had to have an extra guy just to carry ammo. Though it was heavy and difficult, I loved that thing because with it I could easily take out a man-sized target (or an elephant) from more than a half-mile away. It was "sting on a sling."

Realistic conditions

It was training, so nobody was actually trying to kill us yet (except, we often believed, our drill sergeants.) Nonetheless, there was stress of every sort and not the least of it was heat stress. Army training is very realistic and a lot of highly skilled and combat experienced people work extremely hard to make training conditions as similar as possible to real combat.

We were marching up Bains Gap Road, a difficult hill anytime, but much more so during 100°F+ heat. There were "gas" attacks, during which we were assaulted by operatives with tear gas emitting devices, (back then called CS grenades.) When the gas signal was sounded by someone near you, it was necessary to don protective masks and hoods. Failure to do so in time would really burn you. (We now know that the CS gas causes severe lung damage and also liver and kidney damage...but back then it was used daily for training.)

"I had no idea..."

During one stop, around mile #20, I suddenly had a heat syncope and heat stroke. I did not see it coming. I did not feel bad, and had no idea what was happening. I remember lying on my back in a ditch, staring up at a bunch of guys. I could not recognize anyone or hear what they were saying; everything sounded like I was inside a drum of water. I did not know where I was or what was happening. I later learned that the drill sergeant was giving an impromptu class to the rest of the guys on what actual heat stroke looks like.

He, of course, blamed the entire thing on me, saying that I obviously did not eat or drink enough during that day and got myself dehydrated. It was my fault, as is everything when you're in military training. The same is true in regular life...the number one person responsible for protecting you from dangers is right there in your bathroom mirror staring at you.

About 12 minutes later, we landed on the roof of Noble Army Hospital in the Medevac chopper. An IV had already been started and I already felt quite a lot better. The medical doctor told me that if a few more minutes had elapsed prior to the medics' arrival in the helicopter, I'd very likely have died.

Toughness isn't enough

The moral of the story: If we're going to be dumb, we've got to be tough and even then sometimes being tough isn't enough to save you. So, after some years of being "dumb and tough," I've learned it's much better to be smart. You can still be tough without risk-ing serious injury or death.

Today we have safety tools that did not exist back then. We have personal and area heat stress monitors. We have portable hydration packs that allow us to carry large quantities of water or electrolyte beverages and drink them through a tube even when both hands are busy doing work. Uniforms come in "heatdissipating" fabrics. We have thermal imagers so we can "see" the heat.

For intense heat conditions, cooling vests absorb and dissipate the excess heat our bodies produce when under physical stress, in adverse conditions, and even while wearing PPE. We have beads on a string... which are just a number of beads on a piece of string. You hang the string on your belt or uniform, and you move a bead each time you consume a quantity of water. If your employee has not consumed a sufficient quantity of water, a supervisor can see it and immediately give that person a reminder.

We usually have the ability to keep some ice and water in a cooler on most job sites. Keep a few common bed sheets handy. If someone has a heat episode, quickly soak a sheet and wrap their body in it. Heat moves very fast and you can get someone from "danger zone" to "safe zone" pretty quickly. Maintain a heat stress kit like a first aid kit, only with different ingredients.

Here's a head start for you: Go to your favorite search engine and search for these keywords:

- "cooling vest"
- "personal heat stress monitor"
- "personal hydration system"
- "track water intake"
- "spot coolers"
- "electrolyte replacement"

Knowledge is power, and if you know the data and research, you'll be better able to protect yourself and others. I challenge you: Go out and find out about new products, new technologies and new methods for identifying and protecting against heat hazards.

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