



Staff Sgts. Aaron Maggard and Robert Peppard immerse their arms in the Arm Immersion Cooling System during a recent training event on a live fire East Range. A Battery, 1st Battalion, 79th Field Artillery, is currently fielding the new system.

Soldiers learn how to be cool

“Drink Water! Beat the heat, drill sergeant, beat the heat!”



The Arm Immersion Cooling System can bring a body's core level temperature down in a few minutes.

STORY, PHOTOS
 By Staff Sgt. William Sallette
 “Drink water! Beat the heat, drill sergeant, beat the heat!”
 This can be heard from just about any training site at Fort Sill these days. With the heat continuously rising above the 100-degree mark and with no relief in sight, the leaders and Soldiers at Fort Sill are taking every precaution to ensure training continues safely.
 “Heat injuries can be very dangerous, and that is why we take so many steps to prevent them,” said Capt. Michael Tyree, A Battery, 1st Battalion, 79th Field Artillery commander. “Before the Soldiers arrive at the training site, we have tents and solar shades set up, provide plenty of water and sports drinks, ensure they have their hydration backpack systems and have all Soldiers un-blouse their pant legs and roll up their sleeves. We know it is going to reach Heat Category 5, so we set up early to prevent any issues.”
 Some batteries are also fielding new cooling equipment like the Arm

Immersion Cooling System. The AICS allows up to six Soldiers to immerse their forearms and hands into cool water for a set amount of time. This immersion cools the blood that travels through the wrist and in a matter of minutes can bring the body's core level down to a safe temperature.
 The AICS has an internal thermometer to help the leaders regulate the water temperature, and there is a guide printed inside it to let Soldiers and leaders know how long the individual should stay immersed.
 Heat injury casualties continue to remain the highest at Army basic and advanced individual training posts, according to the U.S. Army Combat Readiness Center, but not here at Fort Sill, and certainly not in the 1st-79th FA.
 “We watch each Soldier closely,” said Drill Sergeants. (Staff Sgt.) Richard Fletcher, A Battery, 1st-79th FA. “When the training event is over, we take all Soldiers back to their building and have them take cool showers and change into the physical training uniform to help them cool down.”

The Soldiers are given a number of medical classes including combat life saver, evaluate a casualty and treating a heat casualty. Along with many other classes, these Soldiers are being prepared for anything, but learning the technical side of Army life is not the only thing being taught to the trainees.
 The idea of Soldiers relying on each other has been driven home from the first day they arrived in the Army. Soldiers are assigned a battle buddy, and they are responsible for their battle buddy's actions, or lack thereof.
 “In the short time we have been here, we have been given many classes preparing us for just about any situation, and it helps us to know what we are looking for in our buddy's, so we can help them if they need it,” said Pfc. Tim Scott.
 “It has been verbally beaten into our heads since Day 1 that our number one responsibility is our buddy next to us. Our battle buddy is first and foremost, before anything else,” said Pvt. Leslie Foster.

Fluid Replacement Guidelines for Warm Weather Training
 (Applies to average acclimated soldier-wearing BDU, Hot Weather)

Heat Category	Heat Index °F	Easy Work		Moderate Work		Hard Work	
		Work/Rest	Water Intake, Qt/hr	Work/Rest	Water Intake, Qt/hr	Work/Rest	Water Intake, Qt/hr
1	78-81.9	No limit	½ qt	No limit	¾ qt	40/20 min	¾ qt
2 (Green)	82-84.9	No limit	½ qt	50/10 min	¾ qt	30/30 min	1 qt
3 (Yellow)	85-87.9	No limit	¾ qt	40/20 min	¾ qt	30/30 min	1 qt
4 (Red)	88-89.9	No limit	¾ qt	30/30 min	¾ qt	20/40 min	1 qt
5 (Black)	>90	50/10 min	1 qt	20/40 min	1 qt	10/50 min	1 qt

*Rest means minimal physical activity (sitting or standing) and should be accomplished in the shade if possible.
 Note 1: The work/rest times and fluid replacement volumes will sustain performance and hydration for at least four hours of work in the specified heat category. Individual water needs will vary + ¼ quart per hour.
 Note 2: CAUTION: Hourly fluid intake should not exceed 1¼ quarts. Daily fluid intake should not exceed 12 quarts.
 Note 3: Wearing MOPP gear adds 10°F to WBGT Index.
 Note 4: Wearing body armor adds 5°F to WBGT Index.

Easy Work	Moderate Work	Hard Work
Walking hard surface at 2.5 mph, less than 30-pound load - Weapon maintenance - Guard duty - Marksmanship training - Drill and ceremony	Walking hard surface at 3.5 mph, less than 40-pound load - Walking in loose sand at 2.5 mph, with no load - Calisthenics - Patrolling - Individual movement techniques; i.e., low crawl or high crawl - Defensive position construction - Field Assaults	Walking hard surface at 3.5 mph, greater than 40-pound load - Walking in loose sand at 2.5 mph with load

Fluid replacement guidelines for warm weather training and work/rest cycles are used by Soldiers during warm weather training.



Pfc. Destavious Washington drinks water from his 2-quart canteen while at the zero range with the 1st Battalion, 79th Field Artillery.



Drill sergeants use a Wet Bulb Globe Temperature device during a training event by 1st Battalion, 79th Field Artillery. The device is used to estimate the effect of temperature, humidity, wind speed and solar radiation on people.



Pfc. Joel Ocasio refills his canteen while at a 25-meter zeroing range with the 1st Battalion, 79th Field Artillery.