

Fluid Replacement Guidelines for Warm Weather Training (Unacclimated/Acclimated Soldier wearing BDU, Hot Weather).

Heat Category	WBGT Index, °F	EASY WORK		MODERATE WORK		HARD WORK	
		Work /Rest	Fluid Intake, *Qt/h	Work /Rest	Fluid Intake, *Qt/h	Work /Rest	Fluid Intake, *Qt/h
1	78-81.9	NL	½	NL	¾	40/20 min	¾
2	82-84.9	NL	½	50/10 min	¾	30/30 min	1
3	85-87.9	NL	¾	40/20 min	¾	30/30 min	1
4	88-89.9	NL	¾	30/30 min	¾	20/40 min	1
5	>90	50/10 min	1	20/40 min	1	10/50 min	1

• The work rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specified heat category. Individual fluid needs will vary \pm ¼ qt/hour.

• **NL**=No limit to work time per hour. Rest means minimal physical activity (sitting or standing) and should be accomplished in shade if possible.

• Caution: Hourly fluid intake should not exceed 1-1/4 quart.

• Caution: Daily fluid intake should not exceed 12 quarts per day.

• Caution: MOPP gear adds 10°F and Body Armor adds 5°F to WBGT Index.

• Examples:

*Quarts Per Hour

EASY WORK

- Weapon Maintenance
- Foot Marching Hard Surface at 2.5 mph, < 30 lb Load
- Manual of Arms
- Marksmanship Training
- Drill and Ceremony

MODERATE WORK

- Foot Marching Loose Sand at 2.5 mph, No Load
- Foot Marching Hard Surface at 3.5 mph, < 40 lb Load
- PT
- Patrolling
- Individual Movement Techniques, (i.e. low crawl, high crawl)
- Fighting Position Construction
- STX Lanes

HARD WORK

- Foot Marching Hard Surface at 3.5 mph, ≥ 40 lb Load
- Foot Marching Loose Sand at 2.5 mph with < 40 lb Load
- Running (sustained)
- Obstacle/Confidence Course

FJ Chart 4
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ACTIVITY LIMITATIONS BY HEAT CATEGORY

HEAT CATEGORY	UNIFORM RESTRICTIONS	ACTIVITY LEVELS
I	NO RESTRICTIONS	NO RESTRICTIONS
II	NO RESTRICTIONS	MAY CONDUCT HARD WORK IN DIRECT SUNLIGHT, AT REDUCED PACE AND INTENSITY.
III	SOLDIERS UNBLOUSE TROUSER LEGS, UNBUCKLE WEB BELTS.	MAY CONDUCT HARD WORK AT REDUCED PACE AND INTENSITY. AVOID ACTIVITY IN DIRECT SUN. WATCH FOR CUMULATIVE EFFECT.
IV	SOLDIERS UNBLOUSE TROUSER LEGS, UNBUCKLE WEB BELTS; HELMETS ONLY WORN WHEN NEEDED FOR SAFETY PURPOSES.	ACCLIMATED SOLDIERS HARD WORK MAY CONTINUE AT REDUCED PACE AND INTENSITY USING APPROPRIATE WORK/REST CYCLE FOR CAT IV; UNACCLIMATED SOLDIERS SUSPEND ALL HARD WORK, OTHER OPERATIONS MAY CONTINUE USING APPROPRIATE WORK/REST CYCLE FOR CAT IV.
V	SAME AS CAT IV	SUSPEND HARD WORK, MAY CONDUCT MODERATE WORK AT REDUCED PACE AND INTENSITY USING APPROPRIATE WORK/REST CYCLE FOR CAT V.

NOTES:

1. ACCLIMATION PERIOD FOR PERSONNEL DISCHARGED FROM HOSPITAL IS ONE DAY FOR EACH DAY IN HOSPITAL UP TO 14 DAYS.
2. UNACCLIMATED PERSONNEL ARE THOSE WHO HAVE BEEN AT FORT JACKSON FOR LESS THAN THREE WEEKS. AT TIMES OF SUDDEN WEATHER CHANGES FROM LOW TO HIGH TEMPERATURES NO ONE IS CONSIDERED ACCLIMATED.

HEAT INJURY IDENTIFICATION

SYMPTOM

- MUSCLE CRAMPS (ARMS, LEGS, ABDOMEN)
- EXCESSIVE SWEATING
- THIRST

HEAT CRAMPS

- MOVE CASUALTY TO COOL, SHADY AREA/IMPROVISE SHADE
- LOOSEN CASUALTY'S CLOTHING
- HAVE CASUALTY DRINK AT LEAST ONE CANTEEN (WATER)
- MONITOR CASUALTY/GIVE MORE WATER AS TOLERATED
- SEEK MEDICAL AID IF CRAMPS CONTINUE

FIRST AID

HEAT EXHAUSTION

- HEAVY SWEATING, PALE, MOIST, COOL SKIN
 - HEADACHE, WEAKNESS, DIZZINESS
 - LOSS OF APPETITE, HEAT CRAMPS
 - NAUSEA, WITH/WITHOUT VOMITING
 - CHILLS, (GOOSEFLESH)
 - RAPID BREATHING, CONFUSION
 - TINGLING OF THE HANDS/FEET
 - IRRITABILITY
- MOVE CASUALTY TO A COOL, SHADY AREA/IMPROVISE SHADE
 - LOOSEN OR REMOVE THE CASUALTY'S CLOTHING AND BOOTS
 - POUR WATER ON AND FAN THE CASUALTY
 - HAVE THE CASUALTY DRINK COOL WATER
 - EVACUATE

HEAT STROKE

- RED, HOT, DRY SKIN
 - HEADACHE, DIZZINESS
 - NAUSEA, (STOMACH PAINS)
 - CONFUSION, WEAKNESS
 - LOSS OF CONSCIOUSNESS
 - SEIZURES
 - WEAK, RAPID PULSE AND BREATHING
- HEAT STROKE=MEDICAL EMERGENCY, MUST EVACUATE IMMEDIATELY. START COOLING MEASURES IMMEDIATELY
 - MOVE CASUALTY TO COOL, SHADY AREA/IMPROVISE SHADE
 - IMMERSE IN COOL WATER OR POUR COOL WATER ON CASUALTY. FAN CASUALTY
 - ELEVATE CASUALTY'S LEGS
 - IF CONSCIOUS, SLOWLY DRINK AT LEAST ONE CANTEEN (COOL WATER)

EVACUATION: CALL 911/RANGE CONTROL (7171) TO EVACUATE CASUALTY. CONTINUE REQUIRED FIRST AID UNTIL RELIEVED BY MEDICS.