Headquarters
United States Army, Europe, and Seventh Army
United States Army Installation Management Agency
Europe Region Office
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Army in Europe
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Medical Services

Heat-Injury Prevention Program

For the CG, USAREUR/7A:

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Summary. This regulation prescribes policy and procedures for preventing heat injuries.

Applicability. This regulation applies to Soldiers and civilian employees (U.S. and local national) in U.S. Army organizations in the European theater.

Supplementation. Organizations will not supplement this regulation without USAREUR Command Surgeon (CSURG) approval.

Forms. AE and higher-level forms are available through the Army in Europe Publishing System (AEPUBS).

Records Management. Records created as a result of processes prescribed by this regulation must be identified, maintained, and disposed of according to AR 25-400-2. Record titles and descriptions are available on the Army Records Information Management System website at *https://www.arims.army.mil*.

Suggested Improvements. The proponent of this regulation is the USAREUR CSURG (AEAMD-S, DSN 371-3350). Users may suggest improvements to this regulation by sending DA Form 2028 to the USAREUR CSURG (AEAMD-S), CMR 442, APO AE 09014-0130.

Distribution. B (AEPUBS).

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1. PURPOSE

a. Heat injuries are a serious threat to U.S. Army Soldiers and U.S. and local national (LN) civilian employees. The following are the four most common variables attributable to heat injury:

(1) Climate.

(2) Intensity and duration of the activity.

(3) An individual's risk factors.

(4) Improper rehydration.

b. The risk of heat injury is increased when the variables in subparagraph a above are out of balance. This regulation provides policy to help commanders and other leaders reduce the risk of heat injury.

2. REFERENCES

a. AR 25-400-2, The Army Records Information Management System (ARIMS).

b. Technical Bulletin (TB) MED 507, Heat Stress Control and Heat Casualty Management.

c. AE Pamphlet 385-15, Leader's Operational Accident-Prevention Guide.

d. DA Form 2028, Recommended Changes to Publications and Blank Forms.

e. German Workplace Ordinance.

3. EXPLANATION OF ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
ASG	area support group
BDU	battle dress uniform
DOD	Department of Defense
IMA-EURO	United States Army Installation Management Agency, Europe Region
qt/hr	quarts per hour
lb	pound
LN	local national
min	minute
MOPP	mission-oriented protective posture
mph	miles per hour
NBC	nuclear, biological, and chemical
TB	technical bulletin
U.S.	Unite States
WBGT	wet bulb globe temperature

4. POLICY

a. Commanders, supervisors, and other leaders will ensure the following actions are taken to prevent heat injuries during operations and training activities and at workplaces:

(1) Educate Soldiers and civilian employees (U.S. and LN) on how important it is to promptly recognize the signs and symptoms of heat injuries and to seek immediate treatment.

(2) Measure, record, and post the heat index at training worksites using either the wet bulb globe temperature (WBGT) electronic measuring devices or the WBGT measuring device (national stock number 6665-01-381-3023).

(3) Modify the duty or work uniform to be appropriate for the activity. This can include covering or applying sunscreen to exposed skin to prevent sunburn.

(4) Allow LN and U.S. civilian employees to wear appropriate summer clothes that are suitable for the respective activity.

(5) Monitor water or electrolyte beverage intake and modify work/rest cycles using the WBGT readings and the information in table 1.

(6) Conduct daily risk assessments and pre-mission planning for routine activities as well as for rigorous activities. Adjust work schedules to avoid the hottest part of the day.

(7) Educate Soldiers and civilian employees (U.S. and LN) on potential individual risk factors (including acute or chronic medical problems, use of medications and dietary or performance-enhancing supplements, being overweight or dieting, and having a history of heat injury). Ensure individuals at risk consult with their health-care provider.

(8) Ensure individuals who have a history of heat injury are monitored using "the buddy system" when conducting training or strenuous activities.

(9) Incorporate heat-injury prevention into safety briefings before work assignments and training events.

b. Area support group (ASG) commanders will ensure that their installation commanders and installation coordinators or other appropriate personnel (fire or preventive medicine) obtain a WBGT device for use on their installation. IMA-EURO will procure WBGT measurement devices and distribute them to ASGs. Installation coordinators will take WBGT measurements during summer months when the ambient temperature reaches 75 degrees Fahrenheit (23.89 degrees Celsius). These measurement results must be taken every hour (or more frequently if determined by the installation commander) and distributed by e-mail to all activities on the installation.

c. Preventive medicine professionals will provide the following in their support areas:

(1) Heat-injury awareness training for commanders and agency chiefs.

(2) Training to individuals responsible for taking WBGT readings.

(3) Consultation and advice to commanders and agency chiefs to help them evaluate ways to reduce heat stress.

d. To prevent heat injury in indoor workplaces that do not have air conditioning but where routine activities occur, supervisors should implement the following where appropriate for the work environment:

(1) Open windows when indoor temperatures exceed outdoor temperatures.

(2) Use fans.

(3) Close window shades if shades do not restrict air movement.

(4) Minimize lighting.

(5) Advise employees to wear light-weight clothing and to drink cool water or electrolyte beverages at frequent intervals.

(6) Adjust work schedules to avoid the hottest part of the day.

(7) Move to alternate worksites that offer cooler environments if possible.

(8) Use a liberal leave policy for employees who have medical conditions that raise their risk of heat injury.

(9) Consult with supporting industrial-hygiene professionals in unusual situations when measures in (1) through (8) above do not adequately reduce the risk of heat injury.

(10) Consult with supporting industrial-hygiene professionals to evaluate and determine work/rest cycles for indoor workplace activities where rigorous work activities occur (for example, equipment maintenance, warehouse, or industrial activities).

e. When the measures in subparagraph d above cannot reduce the heat-stress index below heat-category 5, ASG commanders or agency chiefs may close all or part of an activity by granting excused absence (administrative leave) for U.S. and LN civilian employees who are not emergency-essential. This authority may be delegated to installation commanders in locations that are geographically separated from the ASG headquarters.

(1) In communities where the conditions affect more than one DOD activity, the commander or agency chief of the component employing the largest number of U.S. and LN civilian employees will be the approval authority for curtailing operations.

(2) ASG or installation commanders or agency chiefs will coordinate with the lead component authority in (1) above to resolve any differences they may have on a heat-related curtailment of operations.

Table 1
Heat-Injury Prevention

Risk Management:
1. Determine the heat category using the WBGT reading.
2. Enforce fluid intake (water/electrolyte beverages) and work/rest cycle.
3. Modify clothing and environment to reduce risk.
4. Plan work schedules involving high-performance activity.
5. Allow time for conditioning, fluid replenishment, and rest/recovery.

WORK/REST/WATER-CONSUMPTION TABLE

(based on average sized, heat-acclimated person wearing hot-weather BDUs or civilian summer clothing)

Easy (Light) Work Examples	Moderate Work Examples	Hard (Heavy) Work Examples
Soldier tasks: Weapon maintenance Walking on a hard surface at 2.5 mph with less than a 30-lb load **Civilian tasks:** Light hand or arm work Sitting or standing controlling machinery	**Soldier tasks**: Calisthenics or patrolling Walking on a hard surface at 3.5 mph with less than a 40-lb load, or on sand at 2.5 mph with no load **Civilian tasks**: Walking with moderate lifting and pushing	**Soldier tasks**: Field assault Walking on a hard surface at 3.5 mph with more than a 40-lb load, or on sand at 2.5 mph with no load **Civilian tasks**: Heavy shoveling or digging

Heat Category	WBGT Index	Easy (Light) Work		Moderate Work		Hard Work	
		Work/Rest Cycle	Water Intake (qt/hr)	Work/Rest Cycle	Water Intake (qt/hr)	Work/Rest Cycle	Water Intake (qt/hr)
1	78 - 81.9 °F (25.5 – 27.7 °C)	No Limit	½	No limit	¾	40 / 20 min	¾
2 GREEN	82 - 84.9 °F (27.8 – 29.4 °C)	No Limit	½	50 / 10 min	¾	30 / 30 min	1
3 YELLOW	85 - 87.9 °F (29.5 – 31 °C)	No Limit	¾	40 / 20 min	¾	30 / 30 min	1
4 RED	88 - 89.9 °F (31.1 – 32.1 °C)	No Limit	¾	30 / 30 min	¾	20 / 40 min	1
5 BLACK	> 90 °F (> 32.2 °C)	50 / 10 min	1	20 / 40 min	1	10 / 50 min	1

✓Work/rest times and fluid intake will sustain performance and hydration for at least 4 hours of work under the specific heat category.
✓Fluid needs vary depending on the individual (+/- ¼ qt/hr) and sun/shade exposure (+/- ¼ qt/hr) but should not exceed 1.5 qt/hr or 12 qt/day.
✓Rest means minimal physical activity (sitting or standing), in the shade if possible.
✓Body armor or heavy woven protective clothing adds 5 °F to the WGBT reading in humid climates.
✓NBC MOPP 4 adds 10 °F to WGBT reading.

Precautions:
➢Full acclimatization can take up to 2 weeks.
➢Gradually increasing work in heat allows for adaptation.
➢Persons recovering from injury or illness, or in poor condition are at higher risk.
➢Dehydration can worsen over several days of heat exposure.
➢Acclimatization increases water requirements. Ensure fluid (electrolyte beverages/water) intake is increased.
➢Adequate hydration is essential the night before strenuous activity.
➢Eat regular meals to replace salt. Salt tablets are unnecessary.
➢Heat stress accumulates during sequential days of strenuous activity.
➢Warn personnel that certain dietary supplements (for example, Ephedera, Ma Juang) and medications (for example, cold and allergy) increase heat-injury risk.
➢Medically screen personnel who have acute or chronic medical problems, or who are taking prescriptions, over-the-counter medications, or dietary supplements and those with a heat-injury history.
➢Visit http://chppm-www.apgea.army.mil/heat/.
➢Follow policy and procedures in TB MED 507.