



SAFETY NEWS – HEAT STRESS

Working in the heat can be risky to your health. Life-threatening problems can occur if your body is unable to stay cool enough in hot temperatures or high humidity. Heat stress causes a range of health effects, which can lower your job performance and become life-threatening if left untreated.

Health Risks

- **Heat stroke** is life-threatening. Your body can no longer cool itself. You may have hot, dry skin, experience confusion, convulsions, or loss of consciousness. **Heat stroke can kill. If you or a coworker experience symptoms, call 911 and get emergency medical help!**
- **Heat exhaustion** develops when your body has lost too much fluid. Signs of heat exhaustion include damp, flushed skin, feeling tired, nauseous, headachy, or giddy.
- **Heat cramps** occur when salt your body loses from sweating isn't replaced. They affect the muscles you use most and can set in after you've left work.
- **Heat rash** occurs when sweat can't evaporate from your skin. It can make work activities difficult to perform.

PROTECT YOURSELF!

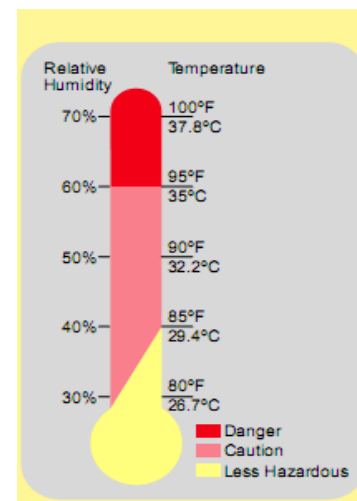
- **Know and report early signs and symptoms.**
- **Drink water frequently.**
- **Take breaks** in cool, shaded areas.
- **Wear light-colored, loose-fitting clothing.**
- **Report problems** with heat, AC or drinking water.

Spotlight on Breaks: No OSHA standard exists on heat breaks. However, the chart below provides **U.S. Army guidance** for work/rest cycles and hydration practices based on the combined temperature and humidity (shown as the WBGT Index below left) and physical exertion. Remember, these are minimum guidelines, not strict rules. **Take action as soon as you or a coworker begins to feel symptoms of heat stress!**

Detach along dotted line and bring to work

Fluid Replacement Guidelines for Warm Weather Training

HEAT CATEGORY	WBGT INDEX DEGREES F	EASY WORK		MODERATE WORK		HARD WORK	
		WORK/REST MIN	WATER INTAKE QT/HR	WORK/REST MIN	WATER INTAKE QT/HR	WORK/REST MIN	WATER INTAKE QT/HR
1	78-81.9	NL	1/2	NL	3/4	40/20	3/4
2 (GREEN)	82-84.9	NL	1/2	50/10	3/4	30/30	1
3 (YELLOW)	85-87.9	NL	3/4	40/20	3/4	30/30	1
4 (RED)	88-89.9	NL	3/4	30/30	3/4	20/40	1
5 (BLACK)	> 90	50/10	1	20/40	1	10/50	1



Take breaks and be alert to signs of heat stress when > 85°F. Implement all precautions when ≥95°F – the **DANGER ZONE** for heat exhaustion and stroke.

A SAFE WORKPLACE IS YOUR RIGHT!

To protect workers from heat stress, employers can:

- Provide *clean water* in convenient locations at all work areas.
- Schedule frequent *rest and water breaks*.
- *Reduce work demands* or scheduling heavy labor for cooler times.
- Ensure adequate *air circulation* in work areas (e.g. ventilation).
- Provide adequate and immediate *medical response* in the event of heat stress.
- *Choose PPE with heat stress in mind*.

Factors Affecting Heat Stress Risk:

- High heat or humidity
- Clothing and PPE
- Physical exertion
- Air circulation (e.g. fan, breeze)
- Direct sun or extreme heat exposure (e.g. hot equipment)
- Physical condition – *You are at greater risk if you:*
 - *are 65+*
 - *are overweight*
 - *have heart disease*
 - *have high blood pressure*
 - *are sick or have been recently ill*
- Acclimatization (heat tolerance) – *Be extra careful during early summer and hot spells when your body is not as adapted.*

DON'T “TOUGH IT OUT”..... A SUPERVISOR (OR COWORKER) MUST TAKE YOU TO A COOLER AREA IMMEDIATELY IF YOU FEEL FAINT, DIZZY OR CONFUSED.....IT IS A MEDICAL EMERGENCY!

Additional Resources:

[Water.Rest.Shade](#) – OSHA’s Campaign to Prevent Heat Illness in Outdoor Workers

[Protecting Workers from Heat Illness](#) – OSHA/NIOSH Info sheet

[Heat: A Major Killer](#) – National Oceanic and Atmospheric Administration

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