

ACTIVITY HAZARDS ANALYSIS

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Project: EC-HMQ

Job: Working in Hot Weather

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Risk Assessment Code(RAC):

M

E = Extremely High Risk
 H = High Risk
 M = Moderate Risk
 L = Low Risk

		P r o b a b i l i t y				
		Frequent	Likely	Occasional	Seldom	Unlikely
S e v e r i t y	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L

Recommended Protective Clothing & Equipment:

Sun block, water, electrolyte replacement fluids, light loose fitting clothing (unless other safety considerations warrant otherwise for PPE), head/neck covering, other cooling devices as needed

Likely, Moderate

JOB STEPS	HAZARDS	ACTIONS TO ELIMINATE OR MINIMIZE HAZARDS	EM 385-1-1 (PARA REF)
Working in Hot Weather Conditions (WQ sampling, HTRW Activities,	Health problems for the employee: Heat Strain Disorders: <ul style="list-style-type: none"> • Heatstroke • Hot-dry, red skin • Mental confusion • Vomiting • Loss of consciousness • Blood clots • Tissue death • Cerebral damage • Central Nervous System dysfunction • Shock • Death • Heath Exhaustion • Cool, moist, pale, ashen skin • Weakness, exhaustion 	<ol style="list-style-type: none"> 1. Use good judgment 2. Remain Properly hydrated 3. Wear sun block 4. Wear hats and loose fitting clothing 5. Take periodic rest (overexertion) – scheduling in cooler parts of the day and regular work-rest intervals 6. Be aware of heat strain disorder symptoms –See Hazards 7. Replace fluids regularly – hydration/electrolytes 8. Toolbox meetings to go over potential heat related problems, factors, injuries, and prevention 9. Microclimate control – removing layers of protective clothing and adjusting and accordingly (e.g. sweat, evaporation, heat) 	Section 6.I

- Heavy sweating
- Headaches
- Nausea
- **Heat Cramps**
- Muscle spasms (leg/abdomen typically)
- **Heat Rash**
- **Potential reproduction effects as early as first trimester (fetus malformation)**
- **Skin disorders (sun exposure related) – cancerous/non-cancerous**

10. Monitor self and coworker for signs of heat related stress (see Hazards) (aka physiological monitoring)
11. Be cognizant of uncontrollable factors that can reduce tolerance to heat (medications, age, gender, health)
12. Monitor weather forecasts as part of pre-job planning
13. Wet Bulb Globe Temperature or physiological monitoring
14. When selecting PPE, follow 24 SEP 2009 CECW-CO: *Modification to List of Protective Clothing Allowed, 33 USC 569*
15. Acclimatization – Monitor to make sure body is adapting to heat (initial increased sweating, increased evaporation and cooling, increased blood flow to move heat, heart rate reduction)
16. **Reproduction-women who might be pregnant should be protected from heat exposure**
17. Training – Red Cross First Aid/CPR/BBP training covering heat – related emergencies:
 - Carefully remove persons to cool place
 - Loosen tight clothing
 - Remove perspiration-soaked clothing
 - Apply cool, wet towels to skin
 - Fan the person
 - If conscious, give small amounts of cool water
 - Get help
 - If person refuses water, vomits, or is unconscious -
 - Monitor ABCs (airway, breathing, circulation)

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| | | <ul style="list-style-type: none">• Rescue breathing or CPR if needed based on training• Get help• Continue cooling using ice packs on wrists, ankles, groin, neck, armpits | |
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