

FIELD RESEARCH SAFETY HAZARD GUIDELINE

Dehydration

Hazards	Potential Hazards	<p>Dehydration occurs when the body loses more fluids than it takes in, resulting in an insufficient amount of water to maintain normal bodily functions. Field researchers, especially those working in hot and dry climates, are at increased risk due to excessive sweating and inadequate fluid intake.</p> <p>Severe dehydration can lead to</p> <ul style="list-style-type: none"> • Heat-related illnesses • Heat exhaustion • Heat stroke
Hazard Controls	Personal Protective Equipment	<ul style="list-style-type: none"> • Personal protective equipment (PPE) for dehydration prevention includes appropriate clothing for hot conditions (lightweight, loose-fitting, and breathable) to help regulate body temperature. • Carrying and using personal water bottles or hydration packs is essential for easy access to fluids during outdoor activities.
	Preparation and Training	<ul style="list-style-type: none"> • Field researchers should receive training on recognizing the signs of dehydration and the importance of proper hydration. • Educate individuals about the risks of dehydration in specific environments and the significance of proactive hydration. • These signs include: <ul style="list-style-type: none"> • dry mouth • fatigue • dizziness • Carry sufficient water for the duration of your fieldwork. • Use electrolyte solutions or oral rehydration salts if working in extreme conditions to replenish lost minerals. <p>Stay informed about local weather conditions and adjust work schedules accordingly.</p>
	General Work Practice Procedures	<ul style="list-style-type: none"> • Stay Hydrated: Drink water regularly, even if you don't feel thirsty. In hot conditions, aim for at least 8-10 cups (2-2.5 liters) of water per day. • Monitor Urine Color: Dark yellow urine can be a sign of dehydration. Urine should ideally be pale yellow. • Schedule Breaks: Incorporate frequent breaks for rest and hydration, especially during peak heat hours. • Avoid Excessive Caffeine or Alcohol: These can contribute to dehydration, so limit their consumption. • Wear Appropriate Clothing: Choose lightweight, breathable clothing to minimize excessive sweating.

		<ul style="list-style-type: none"> Recognize Early Signs: Educate yourself and your team about the early symptoms of dehydration, such as dry mouth, fatigue, and dizziness.
Other	Waste	Containerize, remove, and properly dispose all generated waste when you leave the area.
	Emergencies	<ul style="list-style-type: none"> If someone shows severe signs of dehydration, such as confusion, rapid heartbeat, or fainting, seek medical attention immediately. Move the affected person to a cooler, shaded area and provide water or oral rehydration solutions if available. Rehydrate slowly; drinking too quickly can lead to vomiting.
	Reference and Additional Resources	<ul style="list-style-type: none"> CDC: Heat Stress - Hydration OSHA: Heat Exposure
	Questions	Contact Environmental Health and Radiation Safety (EHRS) at (215) 707-2520