

FIELD RESEARCH SAFETY HAZARD GUIDELINE

Boating

Hazards	<p>Potential Hazards</p>	<p>It is crucial to understand and mitigate these risks by implementing appropriate safety measures, following boating regulations, and maintaining situational awareness to When conducting field research involving boating activities, it is essential to be aware of the potential hazards that can arise on the water.</p> <p>These hazards include but are not limited to:</p> <ul style="list-style-type: none"> •Adverse weather conditions •Navigational challenges •Waterway obstructions •Mechanical failures •Presence of other watercraft <p>Ensure the safety and well-being of researchers and crew members. By being prepared and informed, field researchers can navigate water hazards effectively and conduct their research in a safe and efficient manner.</p>
Hazard Controls	<p>Personal Protective Equipment</p>	<ul style="list-style-type: none"> • Always wear a U.S. Coast Guard-approved life jacket that fits properly and is appropriate for your size and weight. Ensure that life jackets are readily accessible for all passengers on board. • Have a throwable flotation device, such as a ring buoy or cushion, available on the boat. • Whistle or horn to use as a signaling device in case of emergencies. • Satellite phone or marine radio. • GPS navigator
	<p>Preparation and Training</p>	<ul style="list-style-type: none"> • Inform a trusted person about your boating plans, including your destination, expected return time, and contact information. Notify them when you safely return. • Check the local weather forecast and plan your boating activities accordingly. Avoid boating in inclement weather conditions or during storms. • Ensure that there is sufficient fuel for the intended journey and inspect the engine for any visible signs of damage or malfunction. • Check that all required safety equipment, such as fire extinguishers, navigation lights, and distress signals, are in good working condition and easily accessible on the boat. • Fully charge a mobile phone or a marine radio for communication during emergencies. • It is recommended you take courses in: <ul style="list-style-type: none"> • America’s Boating Course • CPR / First Aid

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Other	General Work Practice Procedures	<ul style="list-style-type: none"> • Operate your boat at a safe and reasonable speed, taking into consideration the water conditions, visibility, and traffic. • Never operate a boat under the influence of alcohol or drugs, as they impair judgment and reaction time. • Familiarize yourself with and obey all navigation rules, including right-of-way, speed limits, and no-wake zones. • Assign a lookout to scan the surroundings and be aware of other vessels, swimmers, and potential obstacles. • Do not exceed the recommended passenger or weight capacity for your boat. Distribute weight evenly to maintain stability. • Be cautious of carbon monoxide (CO) poisoning. Ensure that exhaust systems are properly ventilated, and do not swim or linger near exhaust outlets. • Accidents must be reported to the local state authority if any of the following occurs. <ul style="list-style-type: none"> • A person dies • A person is injured beyond basic first aid measures • A person is lost from the vessel • Damage to the vessel or other property resulting from an accident amounts to \$2,000 or more • The vessel is destroyed
	Waste	Containerize, remove, and properly dispose all generated waste when you leave the area. Avoid dumping chemicals, solvents, or other hazardous substances into water bodies.
	Emergencies	<ul style="list-style-type: none"> • Develop an emergency plan and communicate it to all passengers before departing. Include procedures for fire, capsizing, man overboard, or other emergencies. • In case of emergency: <ul style="list-style-type: none"> • Man Overboard: <ul style="list-style-type: none"> • Immediately stop the boat and shout "Man overboard!" to alert other passengers. • Throw a floatation device towards the victim to provide buoyancy. • Execute a rescue maneuver, such as a U-turn, while keeping the victim in sight. • Approach the victim slowly, keeping the propeller away from them, and assist them back on board using a ladder or other means. • Fire on Board: <ul style="list-style-type: none"> • Immediately turn off the engine and shut down all electrical systems. • Move all passengers away from the flames to a safe location on the boat. • Use a fire extinguisher to suppress the fire if safe to do so, aiming at the base of the flames. • If the fire cannot be extinguished quickly, deploy distress signals and call for help immediately. • Capsizing or Swamping:

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		<ul style="list-style-type: none"> • Stay with the boat if it capsizes or swamps to increase visibility and provide a stable platform. • Signal for help using a whistle, horn, or other signaling devices. • Climb onto the boat if possible, staying on the upturned hull or clinging to flotation devices. • Wait for rescue while minimizing heat loss by huddling together and maintaining body heat.
	Reference and Additional Resources	National Weather Service: Safe Boating PA Fish and Boat Commission: Boating Safety Courses NOAA: Know Before You Go Boating
	Questions	Contact Environmental Health and Radiation Safety (EHRS) at (215) 707-2520