

FIELD RESEARCH SAFETY HAZARD GUIDELINE

Hiking		
Hazards	Potential Hazards	Hiking related injuries can be extremely hazardous in remote environments with limited access to emergency services. Getting lost on a hiking trip can be easy and potentially fatal, but also very preventable. Strenuous activity associated with hiking can also exacerbate pre-existing medical conditions.
	Personal Protective Equipment	<ul style="list-style-type: none"> • Sturdy boots • Whistle • Signal mirror • Compass • Map • GPS device • Weather appropriate clothing • Sunscreen • Moleskin • Personal survival kit
Hazard Controls	Preparation and Training	<ul style="list-style-type: none"> • Inform an emergency contact of your intention to hike, what areas you expect to be in, and when you plan to return. • There are many different models of compass with a variety of features. Before going on a trip, you should familiarize yourself with how your compass model functions and some basic skills such as taking bearings and adjusting for magnetic declination and using the compass and a map to locate yourself. <ul style="list-style-type: none"> • Depending on your location, you will have to adjust the magnetic declination on your compass. This adjusts for the difference between geographic and magnetic north poles. These values are often listed on maps. You may have to look this value up before leaving. If your compass does not have a way to adjust for this, you will have to manually add or subtract from your bearings to switch between the compass and the map bearings. • Break-in your shoes before going out on an extended hike, as new shoes can cause blistering that can make it hard to walk safely. Proper boots provide traction and ankle support that can help prevent falls. • Consult your primary care physician as to your physical fitness capabilities with the expected level of exertion. Physical stresses like illness, injury, and adjusting to new altitude can affect your stamina and ability to perform certain activities safely. • It is recommended you take courses in: <ul style="list-style-type: none"> • <u>Wilderness First Aid</u>

	General Work Practice Procedures	<ul style="list-style-type: none"> • When hiking, remain aware of your surroundings. Watch for bad weather, uneven terrain, and becoming distracted. • Keep your feet as dry as possible. Hiking with wet feet can lead to a condition known as trench foot. To prevent this, make sure you change socks and boots regularly. • Do not hike into an area with an active wildfire. • Pack out any cigarette butts to avoid starting a wildfire. • Do not overload your packs, as this can compromise your stability. • Hike up and down steep slopes slowly in a switch-back manner, rather than straight up or down. • Move only as quickly as you are able, without compromising footing or focus. • Avoid handholds such as rocks and trees, as they may not be secure, and you may pull it down on top of you as you fall. • Never follow directly beneath someone. • Falling rocks are extremely dangerous, so do not purposely dislodge any rocks. If you dislodge a rock call out "ROCK" so that anyone below you is alerted to the danger. • Avoid hiking on unconsolidated rock piles, as they could be unstable leading to a fall or a rockslide. • Do not climb cliffs or extremely steep faces without appropriate climbing gear. • If you are fatigued, rest until you are able to continue safely. • Pay attention to "hotspots," areas where clothing may rub against skin. This friction can cause blistering. As soon as you notice discomfort, apply a barrier (e.g., moleskin) to prevent further abrasion. If you have a blister, sterilize it, drain it with a sterile needle, and treat with first aid as an open wound.
Other	Waste	Containerize, remove, and properly dispose all generated waste when you leave the area.
	Emergencies	<ul style="list-style-type: none"> • If someone in your group falls, analyze the situation before helping. If you can get to the person safely, you may administer first aid if they are conscious and moving. If they are not conscious or unable to move, they may have a head/neck injury, so do not move them. If possible, have someone stay with them, keep them warm, and have another pair of people go for help. If they fell into an area that you cannot access safely, call for emergency services. • If you get lost, try not to panic. Take a minute to observe your surroundings and try to reorient yourself with the map and compass. Look for hills, water features, or roads that may be helpful in locating yourself on the map. • Use the compass to identify where you are on a map. <ul style="list-style-type: none"> • Orient the map so that north on the map agrees with north on the ground. • Find at least two distant landmarks with which you will take a bearing. They should be at least 60° apart. • Take the bearing of each landmark and draw a line of the same bearing on your map passing through the landmarks. • Where these lines intersect is your location. • If you are unable to plan a safe course (if it is getting dark or terrain is dangerous), you may have to stay put and call for help. Use the whistle in three short blasts (universal for help) and listen for a response. Go to an open area and make yourself as visible as

		<p>possible. If you are out at night, you will need to find dry shelter.</p> <ul style="list-style-type: none"> • When signaling, keep in mind a red flare is a signal for authorities to start search and rescue procedures. • If you notice that you are having symptoms of trench foot (numbness, swelling, mottled color, wrinkled skin, blistering), stop and dry your feet completely before moving on. • If you notice signs of infection (decaying odor, worsening of symptoms) or severe tissue damage (blackening of skin) on any wound, seek immediate medical attention.
	Reference and Additional Resources	<ul style="list-style-type: none"> • American Hiking Society • American Red Cross - Wilderness Remote First Aid Emergency Reference Guide
	Questions	Contact Environmental Health and Radiation Safety (EHRS) at (215) 707-2520