

Field Safety Procedures – HJ Andrews Experimental Forest

Objectives

Provide information and guidance to minimize the occurrence and severity of injuries and accidents, and to ensure prompt and appropriate response when accidents and injuries occur.

Responsibilities

Individuals are responsible to identify and mitigate potential hazards, follow safety procedures mandated by the employing institution, follow HJA radio and check out/in protocols, and to report accidents and injuries. Responsibilities of supervisors are: to ensure that field-going individuals have adequate information regarding safety and follow HJA radio and check out/in protocols; to monitor safety performance; and to follow-up on reported accidents and injuries.

Rights

Individuals have the right to refuse work assignments without reprisal where undue risk of injury is perceived, and to report unsafe conditions anonymously.

Driving

Driving is the greatest hazard most will face at HJA. Drive defensively at all times.

Shaving five minutes off your work day is not worth the risk of an accident. Follow these guidelines to lessen risks:

- *Slow down.* It will take much longer to stop on steep, gravel-surfaced roads than on the highway. Sight distances are frequently short. Beware of washboard surfaces; they reduce vehicle contact with the road and increase stopping distances. And drive slowly in the HJA HQ as well; there is a high density of vehicles in the compound.
- *Do not cut corners.* Take every corner as if a big truck is just about to come around the corner. Cutting corners will eventually lead to a highly dangerous head-on collision.
- *Use low gears* for steep grades, especially when going downhill. Low gears lessen the stress on brakes going downhill, and allow engines to work more efficiently when going uphill.
- *Yield to other vehicles.* Don't worry about who has the right of way, just pull over and get out of the way.
- *Stay on the road surface.* Watch out for holes, cracking fillslopes, soft areas on the road edge, washboard surfaces, and large rocks.
- *Use an appropriate vehicle.* Sedans do not have enough clearance for many rough roads, and may not be geared for steep roads. Four-wheel drive can be helpful; it may also mean that you can drive further before you get stuck.
- *Use a spotter when backing up.* If by yourself, get out and take a good look to ensure that there aren't rocks or other obstacles hidden in the tall grass. A high proportion of one-vehicle accidents are backing accidents. This applies to the HJA HQ compound as well.
- *Make sure your vehicle is in good working order, and that you have a good spare tire.*

A flat tire is the most likely vehicle problem you'll encounter on forest roads. All accidents should be reported to your supervisor as soon as possible. At a minimum, there will be multiple forms to fill out.

Gates

Take a look inside of the housing protecting the locks before sticking your hands inside. Bees, bats, and birds have been known to nest or rest inside of them. And, unfortunately, cases of hypodermic needles placed inside of gate housings to cause puncture wounds have occurred.

Personal protective equipment

Use common sense. If you're heading off the road, wear boots and hard hat. If you're climbing through the brush, use leather gloves. If you are working around sharp objects or machinery, use a hardhat, set of earplugs, or safety glasses. Carry raingear, layers of clothing for warmth, and sunscreen. Prepare as if you could be spending the night in the woods, especially if by yourself. A check list of personal protective equipment that may be useful to you is included as Attachment A.

Poison oak

Poison oak is a common plant at low elevations on dry, rocky sites. Learn to identify poison oak. If you come into contact with poison oak, wash your clothes and your body as soon as possible. Many claim that TECNU is an effective product to help remove toxic oils.

Animals

The most common animal pests are mosquitoes and flies. Although densities of mosquitoes are not as high around HJA as in the high Cascades, many individuals will want to carry repellent for the occasional time or place they become a severe aggravation.

Bees and wasps, especially yellowjackets, are also common, and bee/wasp stings occur at HJA every year. Yellowjackets tend to become more active and more ornery as the summer wears on. Late August and September can be a bad time for bee stings if the weather is still hot and dry. For most people, bee stings are uncomfortable. If you are allergic to bees though, bee stings are potentially life threatening. *It is the responsibility of each individual to carry a bee sting kit if your medical condition calls for it.* Bee sting kits are prescription items.

Black bears are relatively abundant and you may see one in the woods. The vast majority of the time a bear will try to get away from you as rapidly as possible. It is highly unlikely that a bear will charge you, and many charges are actually bluff charges. In any case, do not run from a bear. Back away slowly. If charged, hold your ground and if it keeps coming, drop to the ground and cover your neck.

Cougars are present, but very secretive. Count yourself lucky if you see one. In the highly unlikely event you are charged by a cougar, fight back vigorously and stay on your feet.

Water

Take plenty. Plan on at least two quarts of water a day – more for very hot days. *Giardia* is always a risk. If you plan on drinking from a stream, take a backpacking water filter or iodine tablets. Modern backpacking filters are small, lightweight, and easy to use. *Giardia* infections are not common in this area, but the consequences can be severe and long lasting.

Food

Take sufficient to replenish your calories. If the weather is cold and wet, take candies or other sources of quick sugar to help keep your body temperature up.

Weather

Summers are generally hot and dry, although rain or thunderstorms can occur at any time. Heat exhaustion is the biggest risk in summer weather. Drink plenty of water and take breaks from the sun.

Cold wet weather is a risk at any time, especially from October through April. Hypothermia can strike the unprepared. Carry and use raingear, bring abundant quick calories, and bring and wear layers of non-cotton clothing.

Hazard mitigation

It will benefit field crews to spend a few minutes at the start of a field task to identify potential hazards and reasonable measures to mitigate those hazards. An example is included as Attachment B.

Radios

Individuals or crews working in the field at HJA should carry a radio for two-way communications. Field radios are available for check out. Supply may be limited; priorities favor users who are working alone or are working outside of standard work schedules (e.g., nights). These radios are intended to provide a means for field-going individuals to communicate with HJA HQ on work-related matters, or Eugene Dispatch (LINCOM after hours) for emergencies. Routine intra-crew communications should be handled through project-purchased walkie-talkies. Radios should be regularly checked (i.e., at least twice a week) to verify continued working order, and back-up batteries carried in the field. HJA HQ radios are not monitored continuously. Coordinate with the site manager regarding radio checks. See [HJA Radio Users Guide](#) for proper use of field radios.

Radios should be switched to channel one to pick up the local repeaters. Channel one is monitored at the McKenzie River Ranger District, by Eugene Dispatch, and sporadically at HJA HQ. McKenzie Fire monitors channel 1 from 9:30 AM to 6:00 PM Monday thru Friday during the summer. Eugene Dispatch is staffed for full-time coverage within designated hours. After hours emergency calls to Eugene Dispatch are picked up by Lincom dispatch service in Lincoln County. Lincom will respond to emergency radio calls to “Eugene Dispatch” or “Lincom”. Eugene Dispatch is not funded by HJA, but will respond in emergencies.

Check out/in

If you don't return to HJA HQ as anticipated no one will know there is a problem if there is no knowledge of who you are, where you are, and when you are due back. The HJA check out/in system is the basic “safety belt” for field-going individuals. It is there for you in the unlikely event something unforeseen happens to you in the field and you need help. It is a habit that takes only a minute or two a day.

All individuals using the Andrews are expected to use a check out/in procedure that includes both a tracking system and a reliable follow-up capacity should the individual not return by the scheduled time of arrival. It is the responsibility of supervisors to ensure check out/in procedures are feasible and implemented. Supervisors are responsible to ensure that there is a functional follow-up capacity for late-arriving individuals. HJA staff is not funded to provide a dispatch service for all individuals using HJA.

Acceptable check out/in procedures include a written record of individuals names, field location(s), vehicle ID, expected arrival time, and check-in buddy. A check out/in board is posted on the wall inside the middle entrance of HJA HQ for this purpose. Departing individuals or crews post this information when they leave for HJA field sites; arriving crews or individuals must clear their entry from the check in board and let their check-in buddy know they are back.

- 1. Before you leave – Move the button to “out” on the Sign Out Board. “Out” means you are in the field. Write down who you are, your planned location(s), your expected arrival time, and your check-in buddy*
- 2. If your plans change during the day, especially your expected arrival time, radio in and notify HJA HQ so someone can change the board. Contact McKenzie Fire if there is no response at HJA HQ and ask them to relay a message by phone.*
- 3. When you arrive – Move the button to “in” and notify your check-in buddy that you’re back.*

The second component of the HJA check out/in system is a reliable follow-up capacity when individuals do not arrive on time. Individuals are expected to be back to HJA HQ by their arrival time. When circumstances change, individuals should contact HJA HQ as soon as possible to update the expected arrival time. If individuals are not back within 60 minutes of their scheduled arrival time, check-in buddies are expected to try and contact late-arriving individuals by radio. If unsuccessful with radio contact, check-in buddies should begin a field search for missing individuals. See the [HJA Overdue Party Search Procedures](#) for detailed instructions on how to initiate a search.

Attachment A - Personal Protective Equipment

Clothing

High-top heavy weight boots with traction soles
Long pants
Long-sleeve shirt
Fleece/light jacket
Full set of raingear
Extra clothing

Equipment

Vest
Compass
Map
First aid kit
Water (2 quarts/day/person)
Food
UV protection (hat/sunglasses/sun block)
Headlamp/flashlight
Goggles
Gloves
Insect repellent
Hardhat
Whistle
USFS radio
Flagging

Attachment B – Example of potential safety concerns and mitigations

Risk	Prevention
<i>Ankle or leg injury</i>	Watch where you are placing your feet, especially on steep terrain. Consider rock outcrops and avalanche chutes inherently dangerous and find other pathways. Always keep a safety margin between members of a group when moving up or down steep terrain. Stay in visual contact with other members of group. Group should move at the pace of the slowest member. Avoid using downed trees as paths.
<i>Hypothermia</i>	Always carry rain gear and extra clothing (layers of outerwear and dry spare pants, shirt, socks, underwear). Quit woods at onset of severe weather or find suitable cover.
<i>Lightning storm</i>	Try to get to vehicle. Avoid grouping together. Do not use radios. Remove caulk boots. Avoid tall trees/snags. Stay off ridge tops and rock outcrops. If you are in danger of being struck (hair standing on end, tingling sensation, ozone smell) spread legs to just beyond the width of hips and squat down balancing on the balls of the feet, in an area with minimum tall structures.
<i>Heat exhaustion, heat stroke</i>	Stay well hydrated, carry sufficient water. Watch for signals i.e., nausea, dizziness, general weakness, clammy skin. If heat exhaustion is suspected, get the victim cooled down.
<i>Ultraviolet exposure</i>	Use sun screen and UV-protected sun glasses.
<i>Contact with toxic agents</i>	
<i>Plants</i>	Use Technu barrier crème if encounter with poison oak is expected. Wash with post-contact product after exposure.
<i>Ticks</i>	Examine self for ticks daily. Remove with a firm grip and steady pull, wash thoroughly, examine bite for any remaining mouth parts and apply antibiotic ointment. Watch bite area for next several weeks for anything unusual.

Yellow jackets

When stung, vacate the immediate area quickly but safely – injuries have been reported from falls suffered when victim panicked upon encountering nest.

If known to be allergic to sting carry proper emergency kit for treatment. Otherwise, administer antihistamine (Benedryl or choramine) and topical ointment.

Mega fauna

Bear

Do not turn and run, back away slowly, quietly and orderly.

If attacked play dead – do not fight back.

Lion

Stay loud and disruptive, wave arms and yell.

Do not turn back to animal.

Fight back if attacked – throw sticks, rocks and stay standing.

Fatigue

Take adequate rest breaks during day and especially at day's end on the way out of the woods.