

U.S. Department of Agriculture Forest Service	1. WORK PROJECT/ACTIVITY General Field Work	2. LOCATION White Mountain National Forest	3. UNIT(S) SO
JOB HAZARD ANALYSIS (JHA) References-FSH 6709.11 and 12	4. NAME OF ANALYST Dan Abbe	5. JOB TITLE Acting Safety Manager	6. DATE PREPARED 9/6/2016
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS	
General Field Work	Various hazards listed below	- Review the 5 practices of safety engagement: Strategic risk, preparation, awareness, learning, agreements. Assess risk based on weather forecast, job description, level of preparedness - physically, mentally, equipment, and training prior to heading out. Throughout day have situational awareness of changed conditions for personal safety and safety of crew. No job is more important than the safety of employees, volunteers or visitors. - USFS Leadership commitment to 'Life First' (significantly increasing the odds that all USFS employees go home; Stop, Think, Talk, then act in response to any situation that may represent unnecessary exposure)	
Vehicle Operation (Highway and Off- Highway Driving)	Other vehicles, wildlife, road conditions	- Refer to and sign Driving JHA for hazards and abatement actions - Ensure the vehicle is in proper working condition. - Check weather / road conditions if necessary. - Be physically and mentally prepared, properly trained and certified - drive defensively and mindfully	
Check in / out procedures	Failure to return due to injury or incident	Sign in and out of the office based on WMNF Protocol	
Radio Communications	Dead Spots Radio Failure Absent Monitoring	- Carry a SPOT device if in known dead zones, working alone, non-traditional hours or doing a high risk activity; use tracking feature on device and carry spare lithium batteries - Ensure the radio is working properly and that batteries are charged before going into the field. - Be trained in radio use to avoid operator errors. - Know who to contact and how in the event FS is not monitoring (nights, weekends, and off-season). - Learn the locations of geographic dead spots and find alternative transmission locations. - Learn the effects of weather on radio transmissions.	
Backcountry Travel	Tick Bites	- Treat clothing (w/permethrin) and/or skin with insect repellent. - Search the body regularly, especially hair and clothing, and remove ticks found. - Be familiar with proper first aid techniques appropriate to tick bites. - If a tick cannot be removed, seek prompt medical assistance. If bitten, watch for signs of illness. Save the tick. Seek medical attention immediately upon exhibiting symptoms.	
FIELD WORK			

	Bee Stings Hornet Stings Wasp Stings	• Be alert to hives in brush or hollow logs. Watch for swarms of bees traveling one direction. • Inform supervisor of bee allergies and carry emergency medication at all times. • Avoid heavy or perfumed scents. • If attacked, shield the face and quickly leave the area. • Avoid wearing bright colors and metal objects. • Be familiar with proper first aid techniques appropriate to bee stings. • If stung and having an allergic reaction, administer first aid and seek medical attention immediately. • Know if any member of the crew is allergic to bee stings and if they carry a med. kit
	Mosquito Bites	• Avoid heavy or perfumed scents. • Use insect repellent.
	Wildlife Attacks	• Watch for fresh wildlife signs, particularly when alone. • Make noise when traveling in bear country. Avoid surprising a moose or bear • If a bear is encountered, stop and back away slowly. Talk in low tones, and try not to intimidate the bear. • If the bear behaves aggressively, try to intimidate it by raising arms or a large object over the head. • If charged, throw rocks, branches, or other objects at the bear. Be threatening. Do not run. • If attacked, fight back. Shout loudly and try to remain standing. Protect head and neck if possible. • Don't pack foods with strong odors. Store food in airtight containers, such as plastic bags or jars.
	Falls, Tripping hazards, Eye injuries, Foot injuries, and Stress and Impact Injuries	• Identify and use safe travel routes. Do not exceed physical abilities or equipment design. • Use pack equipment properly. Carry weight on hips, not back. • Warm up and stretch the appropriate muscle groups before and after hitting the trail. • Test and use secure footing. Move cautiously and deliberately. Never run. • In heavy undergrowth, particularly off-trail, slow down and watch carefully. • Carry tools on the downhill side. • Know basic first aid. • Footwear should provide ankle support and have a non-slip sole. • Know how to fall. Roll, protect the head and neck, and do not extend arms to break the fall. • Watch for branches that may poke eyes. Eye protection is encouraged but not required. • Hard hat should be worn when an overhead hazard exists. • Watch for old fence wire when bushwhacking. • When working in areas that have known overhead hazards, consider wearing a hard hat as needed.
	Falling Trees, Snags and Overhead Hazards	
Backcountry Travel continued	Disorientation	• Carry and know how to use maps and orienteering equipment. • Monitor travel on a map, and note landmarks along the way. • Carry a basic survival kit and enough equipment to survive. • If lost, maintain position, radio for assistance, and make camp. Don't panic, just wait patiently.

	FIELD WORK	Backcountry Travel continued	Dehydration	• Drink frequently throughout the day. • Maintain blood sugar and electrolyte balances. • Carry enough water to meet hydration needs between reliable water sources. • Avoid beverages with caffeine and alcohol. Drink only water, a sports drink, or diluted fruit juice.
			Lightning Strikes	• Do not use radios or other electrical devices during an electrical storm. • Take cover, but avoid the tallest objects. If no cover is available, get down on the ground. • Avoid ridge lines, hill tops, open spaces, rock outcrops, and other likely lightning targets. • Discard metal tools, backpacks with metal frames, and electrical devices during an electrical storm.
			Hypothermia	• Dress properly for altitude, weather, and climate of work area. Be prepared for worst-case weather. • Pack wet weather outerwear (waterproof). Stay dry. • Avoid cotton fabrics in cool, wet conditions. Instead, wear synthetics or wool. • Layer clothing to maintain a comfortable body temperature. Avoid getting too hot or cold. • Stay fit, drink lots of water, eat high-energy foods, get adequate rest, and take time to acclimate. • Learn how heat and cold affect the body and how to regulate body temperature. • Be familiar with proper first aid techniques appropriate to hypothermia and hyperthermia. In dangerous cases of hypothermia or hyperthermia, when safe, seek medical attention immediately.
			Falling Trees	• Learn to identify hazard trees. • Do not camp or take breaks within 1.5 tree lengths of a hazard tree. Be watchful in windy conditions.
			River Crossings	• Do not attempt to cross deep, fast water, particularly during spring snowmelt or a flood. • Use a long stick or trekking pole to probe for deep spots and aid in balance. • Cross at a 45-degree angle traveling upstream. • Do not cross barefoot. Use care placing feet.
			Fatigue	• Take breaks, as needed, and get plenty of sleep at night. Avoid over exertion. Stick to the schedule. • Eat and drink well. • Regulate body temperature. Avoid high heat and extreme cold. • Use extra care at the end of the day, when fatigue is most likely and accidents are most common.
			Waterborne Illnesses	• Drink bottled water or water obtained from a municipal source of culinary water. • Boil water well for 3-5 minutes, or treat it with iodine tablets, following instructions provided. Or, use a water purifier or microfilter, depending on conditions, designed for backcountry applications.
			Contact with Poisonous Plants	• Avoid contact with poisonous plants. • Wear long shirts and pants when working with these plants. Use a barrier cream, if particularly sensitive to exposure. • Avoid handling contaminated clothing or tools. • Do not burn poisonous plants. • Be familiar with first aid techniques appropriate to poisonous plants.
			Hunting Season	• Wear blaze orange colors for visibility during the hunting season.

Ergonomics considerations for fieldwork	Poor biomechanical position resulting in immediate acute or long term chronic injury that affect muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels or spinal discs of the body.	• Be aware of and consider the best correct position to avoid: - CTDs (cumulative trauma disorders) - RSIs (repetitive stress or repetitive strain injuries) - RMIs (repetitive motion injuries) - Overuse syndrome • Warm up parts of the body that will be most used in the job. • Get help with heavy objects or use tools to reduce the load ie. cheater bars, hand trucks, carts, etc. • Avoid awkward and static positions, static loads and sustained exertion, repetition, contact stress, extreme temperatures, and vibration. • Consider job rotation, more staffing, more rest breaks, slower work pace, and altering work methods. • Follow established work/rest policy. Only 10 hours/day may be spent driving, with breaks every 2 hours. • Remain alert. Use the air conditioning or stereo or open the windows, if needed. • Maintain good eating and sleeping habits and drink plenty of water. Don't overexert before driving. • If fatigued, do not continue to drive. Pull over and take a nap, or seek overnight lodging when possible.
Extended Travel	Fatigue Vehicle/Object Collision	• Know where to get immediate assistance. Call for an escort, if necessary.
Working After Hours	Assault or Conflict Random Acts of Violence	• Inform someone of work plans and/ or intention to work after hours. Check-in with a designated office daily, particularly if working alone. • Quickly and quietly leave the area and seek help, if a dangerous situation is suspected. • Learn the warning signs of a potential assault. Avoid dangerous situations and hostile visitors. • Avoid confrontations. Don't antagonize a possible assailant. Know when and how to escape. • Watch for suspicious behaviors. If such behavior is noticed, leave the area. Don't take chances. • Know how to get help quickly. Radio for assistance, if necessary. • Never enter an occupied building that is known to be vacant. • Park vehicles to take advantage of lighting and the shortest route of travel to and from a building
Visitor Contact / Working after Hours	Assault or Conflict Random Acts of Violence	
FIELD WORK		
10. LINE OFFICER'S SIGNATURE	11. TITLE	12. DATE
<i>James R. McDaniel</i>	Deputy Forest Supervisor	9/7/2016

JHA INSTRUCTIONS (References-FSH 6709.11 and .12) The JHA shall identify the location of the work project or activity, the name of employee(s) involved in the process, the date(s) of acknowledgment, and the name of the appropriate line officer approving the JHA. The line officer acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity. Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory. Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP). Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in Block 7. For example: a) Research past accidents/incidents. b) Research the Health and Safety Code, FSH 6709.11, or other literature. c) Discuss the work project/activity with participants. d) Observe the work project/activity. e) A combination of the above. Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in Block 8. Abatement measures listed below are in the order of preference: a) Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture. b) Substitution. For example, switching to high flash point, non-toxic solvents. c) Administrative Controls. For example, limiting exposure by reducing the work schedule; establishing appropriate procedures and practices. d) PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, and portable water pumps). e) A combination of the above. Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE. Blocks 11 and 12: Self-explanatory.	EMERGENCY EVACUATION INSTRUCTIONS (Reference FSH 6709.11) Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite. Be prepared to provide the following information: a) Nature of the accident or injury (avoid using victim's name). b) Type of assistance needed, if any (ground, air, or water evacuation). c) Location of accident or injury, best access route into the worksite (road name/number), identifiable ground/air landmarks. d) Radio frequencies. e) Contact person. f) Local hazards to ground vehicles or aviation. g) Weather conditions (wind speed & direction, visibility, temperature). h) Topography. i) Number of individuals to be transported. j) Estimated weight of individuals for air/water evacuation. The items listed above serve only as guidelines for the development of emergency evacuation procedures. JHA and Emergency Evacuation Procedures Acknowledgment: <i>We, the undersigned employees, acknowledge participation in the development of this JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of these documents:</i> SIGNATURE DATE
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