



Safety Plan

Resource Management Division of Nez Perce National Historical Park

Natural Resource Report NPS/NEPE/NRR—2013/656



ON THE COVER

Nez Perce NHP and Big Hole NB employees returning from work early due to thunderstorm at Big Hole National Battlefield.
NPS photo

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Jannis Jocius
National Park Service
Nez Perce National Historical Park
39063 US Highway 95
Lapwai, ID 83540

Jason Lyon
National Park Service
Nez Perce National Historical Park
39063 US Highway 95
Lapwai, ID 83540

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Executive Summary

The Safety Plan for the Resource Management (RM) division of Nez Perce National Historical Park (NEPE) is both an action plan and reference for NEPE staff and partners to conduct safe work in and around park sites. It is our goal to succeed in providing employees with a safe environment to do their jobs safely and effectively. The plan details the safety responsibilities of supervisors and employees and spells out practices for working safely, communicating, training, responding to incidents, operating motor vehicles, hazard identification, reporting, and other aspects such as situational awareness, that can insure a safe workplace.

Acknowledgments

The initial outline and content for this Safety Plan are based on the safety plans for the Chihuahuan, Greater Yellowstone, and Sonoran Desert Networks. These safety plans provided the overall framework as well as source material for potential environmental hazards crews may encounter in the field. The Upper Columbia Basin Network (UCBN) Inventory and Monitoring (I&M) Program developed a working safety plan for which this park plan was ultimately based upon. Additional input was received from park resource staff.

Acronyms

AMC—Accident Management Center

BEPA—Bear Paw Battlefield

BIHO—Big Hole National Battlefield

CDSO—Collateral Duty Safety Officer

CFR—Federal Code of Regulations

CPR—Cardio-pulmonary Resuscitation

PDF—Portable Document Format

GPS—Global Positioning System

GSA—General Services Administration

JHA—Job Hazard Analysis

MSDS—Material Safety Data Sheet

NEPE—Nez Perce National Historical Park

NPS—National Park Service

NPSafe—National Park Service Safe Acts and Attitudes Foster Excellence

OWCP—Office of Worker's Compensation Program

OSHA—Occupational Safety and Health Administration

PPE—Personal Protective Equipment

SF—Standard Form

SMIS—Safety Management Information System

SOP—Standard Operating Procedure

USFS—United States Forest Service

WHMI—Whitman Mission National Historic Site

Introduction

The purpose of this Safety Plan is to provide a comprehensive summary of work related safety policies, procedures, guidelines, issues, precautions, and advise for everyone working at Nez Perce National Historical Park (NEPE). The National Park Service (NPS) and NEPE have both a responsibility and concern to insure a safe and healthy workplace for employees, volunteers, cooperators, contractors, concession employees and visitors. Identifying and controlling exposure to hazards can positively affect the visitor experience and aid the accomplishment of the NPS mission. The service as a whole and the park in particular is committed to reducing workplace accidents, injuries and illnesses, and the associated pain, suffering and loss associated with them. This plan can help to cultivate a culture of safety, with the idea, that if a job cannot be done safely, it will not be done until the safety concerns have been addressed.

At NEPE we expect that each manager, supervisor, employee, and volunteer has the knowledge to understand the importance of a safe workplace, to be able to recognize hazards, to engage in and encourage safe practices and to take responsibility for safety. Supervisors shall insure that all employees are aware of, and understand this Safety Plan through annual training of their staff.

Guiding Principles

- Safety is a condition of employment at NEPE.
- All injuries and occupational illnesses can be prevented or mitigated.
- Management is responsible and accountable for preventing injuries and occupational illnesses.
- Employees must be trained to work safely.
- The combined energy of everyone at NEPE is necessary to continuously improve safety performance.
- Management must audit performance in the work place to assess safety program success.
- All concerns must be addressed promptly.
- Safety must be integrated as a core operational and personal value.

The purpose of this Safety Plan is to provide a comprehensive summary of work-related safety precautions, issues, policies, and procedures for all people associated with NEPE. Through frequent conversation and training, NEPE staff can prevent most injuries from occurring and effectively respond to injuries that do occur.

NEPE supervisors will ensure that all employees are aware of, and understand this Safety Plan through annual training of all staff.

1.1 Scope

These guidelines apply to all NEPE staff (permanent, temporary, student, and volunteer), cooperators, contractors, partners, and others working in concert with NEPE. Compliance with these guidelines is essential to ensure personal safety. Failure to comply with these guidelines could result in disciplinary action.

1.2 Park Background

NEPE includes 38 sites across parts of Montana, Idaho, Oregon, and Washington in the northwestern U.S. These sites were set aside to: facilitate protection and offer interpretation of sites that have exceptional value in commemorating the history of the United States; preserve and protect tangible resources that document the history of the Nez Perce peoples and the significant role of the Nez Perce in North American history; and interpret the culture and history of the Nez Perce peoples and promote documentation to enhance that interpretation (Nez Perce NHP 1997). NEPE staff also provide management assistance for natural and cultural resources at Whitman Mission National Historic Site (WHMI) near Walla Walla, Washington, Big Hole National Battlefield (BIHO) near Wisdom, Montana, and Bear Paw Battlefield (BEPA) near Chinook, Montana.

Of the thirty-eight NEPE sites, nine are managed by the National Park Service (NPS). These sites include:

Bear Paw Battlefield (BEPA) – located 16 miles south of Chinook, Montana;
Big Hole National Battlefield (BIHO) – located 10 miles west of Wisdom, Montana;
Buffalo Eddy (BUED) – located 18 miles south of Asotin, Washington;
Canoe Camp (CACA) – located approximately 4 miles west of Orofino, Idaho;
Heart of the Monster (HEMO) – located one mile south of Kamiah, Idaho;
Old Chief Joseph Gravesite (OLJO) – located one mile south of Joseph, Oregon;
Spalding Site (SPAL) – located 11 miles east of Lewiston, Idaho;
Weippe Prairie (WEPR) – located 8 miles south of the town of Weippe, Idaho;
White Bird Battlefield (WHBI) - located 15 miles south of the town of Grangeville, Idaho.

There are four management divisions at the park: Maintenance, Administration, Interpretation, and Resource Management. The resources program includes both Natural and Cultural Resource Management.

1.3 Relevant NPS Policy

NPS Director's Order #50B: Occupational Safety and Health Program (NPS 2008) provides NPS managers, supervisors, and employees with direction for the implementation of a comprehensive risk management program that provides for the occupational safety and health of NPS employees and identifies strategies to minimize the loss of NPS human, physical, and fiscal resources due to preventable accidents.

This Director's Order mandates that every NPS employee:

- Adheres to established occupational safety and health procedures.
- Properly uses and maintains required clothing and/or personal protective equipment (PPE).
- Takes the initiative for his/her own safety and health, and that of co-workers.
- Takes the initiative to maintain a level of personal wellness and fitness as needed for assigned work tasks.
- Identifies and, where appropriate, corrects unsafe conditions and work practices.
- Reports unsafe/unhealthful conditions and/or operations.

- Immediately reports a mishap, including minor accidents or a “near-miss,” to supervisor, no later than the end of the work shift.
- Helps establish a safe and healthful working culture and practices safe work procedures, even when working alone.

The NPSafe Program (Safe Acts and Attitudes Foster Excellence), implemented by the NPS’s Division of Risk Management, works to ensure all NPS units have the skills and knowledge to: (1) provide a safe and healthful worksite for NPS employees; (2) provide, to the greatest extent possible, for the safety of the visiting public; and (3) minimize human capital and monetary losses, through effective workers' compensation case management.

Implementing Safe Practices

Although crew and individual safety is of primary importance, it is not possible to remove all unsafe conditions from the field environment. Project managers and supervisors have a responsibility to provide training and informational materials to field crew and office personnel that will make their jobs as safe as possible. Both employers and employees are responsible for safety.

Everyone is a safety champion. The role of a safety champion is to increase awareness and facilitate conversation about safe practices. Safety champions are also the “eyes and ears” of the Safety Officer, serving to assist in the implementation of the Safety Plan and related programs, and looking for opportunities to build on and improve the plan and programs.

1.4 Responsibilities of the Safety Officer

The NEPE Idaho Unit Manager is the Collateral Duty Safety Officer (CDSO) for NEPE. The CDSO is referred to as a Safety Officer for the purposes of this document.

The NEPE Safety Officer will be responsible for the overall coordination of the safety and health program. The Safety Officer will be generally responsible for:

- Overseeing the implementation of NEPE’s Safety Plan and programs.
- Ensuring that safety and risk management training is provided for all employees.
- Conducting a baseline hazard assessment and periodic hazard assessments of NEPE operations.
- Setting hazard correction priorities and tracking correction of those hazards.
- Conducting annual program evaluations and reviews of the NEPE safety plans and procedures, and making adjustments when needed to increase their effectiveness.
- Conducting incident investigations as appropriate.
- Assisting in providing hazard control planning especially where technical expertise is required.
- Maintaining records required by the NEPE safety plan and Occupational Safety and Health Administration (OSHA).
- Coordinating the implementation of the Safety Management Information System (SMIS) for the operating unit and ensuring that the supervisor and employee have accurately entered all employee incident/accident data into SMIS.
- Advising the Integrated Resource Manager of all lost time, employee accidents/incidents and maintaining an OSHA 300 Log for NEPE.
- Providing the superintendent with data and reports on overall site occupational safety and health program progress, including annual program evaluation.

1.5 Responsibilities of Supervisors:

- Provide safety training for all employees, including first aid.
- Provide proper safety equipment.
- Provide appropriate personal protective equipment (PPE).
- Report and investigate all accidents and incidents.
- Ensure employees are aware of safety tools and comply with the safety program.

1.6 Responsibilities of the Employee:

- Report unsafe working conditions.
- Comply with safety and other work regulations.
- Use safety equipment and personal protective equipment.
- Report all accidents and incidents per NPS Director's Order #50B.

Safety is prevention of accidents and injuries

An important aspect of work in the office or field, and especially a backcountry setting, is personal preparedness and self reliance. People are responsible for their own safety as it relates to the nature of their work. It is each individual's responsibility to know his/her environment, to properly prepare and to act responsibly. A successful field work day requires situational awareness and the ability to anticipate and respond to problems (risk management). Discretion is a key element in this process. Staff must keep this in mind while completing tasks in the office or when going from the office to the field.

1.7 Situational Awareness

Situational awareness is the perception of environmental elements with respect to time and or space, the understanding of their meaning and how this changes or can change with time or space. When a person loses situational awareness he/she increases the potential for human error. The loss of situational awareness usually occurs over a period of time and will leave a trail of clues. Factors that reduce situational awareness include the following:

- Confusion or gut feeling that something is “off” or “confusing” or “unsafe”
- Lack of attention to surroundings
- Departure from established policy or procedure
- Failure to meet objectives or follow plans
- Ambiguity
- Fixation or preoccupation
- Insufficient communication
- Fatigue or stress
- Task overload
- Task under load (complacency)
- Group mindset
- “Press on regardless” philosophy
- Deteriorating conditions, such as weather and fatigue

Numerous potentially hazardous situations arise out of the physical condition of the environment we work in. Safe practices allow us to prevent these conditions from causing harm. Supervisors are responsible for providing instructions on how to avoid environmental hazards and crew leaders implement these instructions when a crew or crew member is faced with such hazards. The most important tool is situational awareness. Being aware of your surroundings—the weather, distractions in the office, potentially harmful plants and animals, and the terrain—and how to safely interact with them gives you the opportunity to minimize danger.

To maintain situational awareness, pay attention to current and changing conditions. What is your physical and mental status? Are you properly clothed and equipped for your trip? Observe your surroundings. Watch your footing. Evaluate current and expected weather (beware of changes that could affect safe travel). Has your trip itinerary changed? Regularly communicate your location and status.

Good situational awareness requires constant attention and processing of all the objective and subjective information that surrounds you. Situational awareness is an essential element to managing risk.

1.8 Risk Management

Risk management is a process that begins with effective situational awareness. Risk management helps ensure that critical factors and risks associated with all work-related activities are identified and considered during the decision making process. This proactive process must precede action and may follow the Green, Amber, and Red risk assessment process (G.A.R.).

Risk management should include the following five steps:

1. Identify hazards (e.g., weather, terrain, animals, tripping hazards). See Appendix C. Environmental Hazards for some of the more likely hazards in NEPE.
2. Assess hazards (e.g., How long is the outing? Does the outing exceed my skill and ability? Is my footwear adequate? Do I have enough water? Will I be prepared for rapid change in temperature once the sun sets (hypothermia)? Will the visibility remain the same or is a storm likely to occur? Is it hunting season? Is this box too heavy or awkward to carry by myself?)
3. Make decisions (e.g., Do the benefits outweigh potential costs? Do the benefits of hiking out in the middle of the day outweigh those of waiting until it cools? Should I turn around?)
4. Implement controls (e.g., Are controls in place for identified hazards? Has the best route been identified? Do other reasonable routes exist? Is my safety equipment ready? Have I asked for help to move something or to complete a repetitive task?)
5. Evaluate (e.g., Reevaluate your decision. Is it still a good decision? Are conditions different than anticipated? Reassess. Change the plan if necessary!)

1.9 Personal Protective Equipment

The use of personal protective equipment by NEPE personnel may be necessary for certain activities to protect workers from hazards which cannot be eliminated by engineering controls or other means. The need for the park to supply PPE is normally identified in the standard operating procedure (SOP) or the job hazard analysis (JHA) for the activity.

1.10 Job Hazard Analysis

Project leads and supervisors are responsible for the development of a job hazard analysis (JHA) for each project implemented in the workplace and field. The Integrated Resource Manager and Safety Officer will approve all JHAs and staff are required to sign JHAs before beginning fieldwork. Binder copies of the JHAs will be kept in supervisors' offices.

Job Hazard Analysis procedures include identification of tasks, potential hazards, and safe job practices/procedures. A JHA is required to be completed for:

- Jobs or work practices that have potential hazards
- New or non-routine tasks to be performed where potential hazards exist
- Jobs that may require employee use of PPE
- Changes in equipment, work environment, conditions, practices, policies, or materials

Most field tasks, if hazardous, probably fall under one of the first two categories.

Supervisors shall discuss the job hazards with employees prior to beginning new projects or upon changing work sites, identify any hazards not noted on the JHA, and discuss ways to reduce these hazards, including the use of protective equipment. Supervisors and appropriate line managers shall ensure that established JHAs are reviewed and signed prior to any non-routine task, or at the beginning of the field season.

1.10.1 Developing a Job Hazard Analysis

In order to develop a JHA, the job to be evaluated is broken down into basic steps by the supervisor and the employee(s) assigned to perform the job. For each step, job hazards and safe job procedures are identified. The JHA Form is used for the preparation of JHAs (see Appendix A).

1. **Identification of Tasks.** Each step of a job should be identified by a major task and should be briefly described in the order in which it is performed. Three or four words may be sufficient to describe each job step. Avoid steps that are too detailed. They will make the JHA unnecessarily long and trivial. For example, sanding and painting a picnic table are major tasks to be listed; opening a paint can is not considered a major task and would not be included on the JHA. Most jobs can be separated into 12 to 15 basic steps.
2. **Potential Hazards.** Each step is examined to identify potential hazards. Hazards may be associated with work practices, procedures, equipment, materials or environment. Questions to be considered to help identify specific hazards include: Could the worker come in contact with; be struck by; strike against; be caught in, under, between; slip, trip, or fall; cut by; or suffer from overexertion?
3. **Safe Job Procedures.** Safe job procedures to reduce or abate the hazards are identified. The use of general terms such as “be careful”, “use caution”, or “work safely” should be avoided. Safe job procedures will normally fall into one of the categories listed below:
 - Environmental change
 - Reduction in the frequency a task is performed
 - Personal protective equipment changes
 - Job procedures/work practices
 - Safe behaviors
4. **Job Hazard Analysis Review.** At NEPE, resource management JHA reviews will be done by the Safety Officer and the Integrated Resource Program manager and other staff as appropriate.
5. **Job Hazard Analysis Reevaluation.** Although used throughout the year, established JHAs should be reevaluated periodically, at least every three years, to ensure that they reflect the latest, safest, and most efficient way to perform the task. New equipment, tools, methods, and changes in safety standards should require modifications in JHAs. Employees and supervisors should work together when reevaluating the JHA to assure that all characteristics of the job are addressed and that the safest and most efficient means of performing a job will be utilized. At any time updates can be made to the JHA which will most likely happen during the annual review of the JHA prior to the field season.
6. **Job Hazard Analysis Recordkeeping.** Supervisors are responsible for maintaining JHA records. A signed version of the final review copy will be kept on file in NEPE’s centrally located files.

Nez Perce National Historical Park Safety Procedures

The following summarize safety procedures implemented by NEPE. Further details and instructions are found in later sections.

1. Multi-day projects and projects that require field activities accomplished by more than 4 staff members, volunteers will have a safety Standard Operating Procedure (SOP) to address safety procedures specific to the project. The SOP tiers and links to the applicable JHA and procedures provided by this Safety Plan.
2. Natural and cultural resource activities as identified will have a JHA prepared to identify and mitigate hazardous situations (see Section 3.4 for details).
3. A safety orientation program will be provided to each new and returning resource program employee to increase understanding of the NEPE policies and mission statements concerning employee safety and health and to learn about procedures that safeguard them in the performance of their assigned tasks.
4. NEPE, BIHO, BEPA, and WHMI contact information is always current and available in the office and in the vehicle safety binder.
5. Employee Medical and Emergency Forms are on file and available to NEPE staff responsible for primary and back-up communication in the event of a medical or non-medical emergency.
6. At the beginning of each field project (daily) a tail-gate safety session is held to communicate safety related messages such as extreme weather conditions, river or stream discharge and flood warnings, fire danger, and fire closures. The tail-gate session is a good time to identify safety concerns and remind staff of park-specific guidelines or protocols as they apply to the assigned work and to communicate availability of phones and best forms of communication during the field day.
7. Working alone in the field is allowed with notification of the Integrated Resource Manager or delegate. When it is necessary for a person to work in the field alone, this person must carry a communication device and communicate with others about where s/he will be working, planned travel routes, and return times. Field personnel must let other staff know of their offsite travel information via the white board in the Visitor Center basement and/or through verbal communication.
8. Field crews will carry reliable form(s) of communications while in the field (see section 5.2) and will have emergency contact numbers available at all times.
9. NEPE employees are prohibited from working beyond 16 hours per day although any planned day longer than 12 hours must be previously approved by the Integrated Resource Manager or delegate. These longer days may include remote sites that involve considerable travel time on foot and when the crew leader deems the work can easily be accomplished without jeopardizing the safety of the crew. The decision to work extra hours should be contingent on having already made preparations for such an event, such as carrying extra food, clothing, water, headlamps/flashlights, and notifying contact personnel such as the local NEPE office staff.
10. Agency driving regulations must be followed. Referring to the Wildland Fire Management – Business Handbook – no driver will drive more than 10 hours (behind the wheel) within any duty day.
11. General recommendations for footwear on and off trails are to wear hiking boots, at least 6” in height, with slip-resistant heels and soles with firm, flexible support. Boots should

be adequately “broken in” prior to extensive use in the field to prevent blisters and other damage to feet.

12. General recommendations for clothing in the field are to wear long-sleeved shirts and long pants to guard the employee from brush, insect and/or snake bites. Brimmed hats and sunglasses are strongly recommended. Carrying rain gear and warm clothing is also recommended.
13. Each crew or person (if working alone) will carry an emergency safety kit, but will also carry personal medications and other equipment as recommended (see Appendix E).
14. There must be at least one person on a crew with basic first aid training.

Communication

The supervisor, project leader, field crew leader, and Safety Officer are responsible to update and communicate safety information resources to field crews and individual staff members throughout the season. Safety information resources include:

1. NEPE resource management and park contact information – This is maintained and updated, at least annually, by the Integrated Resource Manager. Field personnel should be promptly notified of any changes.
 - a. All resource management employees' office, email, home and cell phones should be up to date.
 - b. Park contacts include park staff that are directly or most closely associated with the project; law enforcement numbers for each park site, the park Safety Officer; other important names and numbers, and emergency contact information.
2. NEPE and cooperating staff emergency contact information – The project leader and the Integrated Resource Manager is responsible that an emergency contact form is complete and on file for all staff. A blank form is filed on the NEPE server at W:\Safety\Resource_Management_Division\Safety_Plan. Completed forms will be filed where staff responsible for employee check-in can be guaranteed access.
 - a. NEPE employee emergency contact list includes family members or other contacts that should be notified in the event of an emergency and/or health condition like: diabetes, allergies, physical limitations or chronic injuries for which crew member needs regular medical attention.
3. NEPE Vehicle Safety binder(s) – the Natural Resource Specialist will ensure that the vehicle safety binder is complete and up-to-date. The safety binder includes the Resource Management Safety Plan, NEPE safety plan, and appendices. Lists of required and recommended contents are included in Appendix E.

1.11 Communication Roles and Responsibilities

Employees have the right and responsibility to notify their supervisor, safety representative, or other staff member if they believe the workplace or work procedures are unsafe or s/he cannot safely perform a task. In such circumstances, the task in question should not be performed until the concern is alleviated. The following defines the communication roles and responsibilities for the different individuals. It is possible that an individual may serve in more than one role (i.e., project lead and field crew leader are the same individual).

Integrated Resource Manager (NEPE staff) ensures that all staff have an avenue to communicate safety concerns and listens openly to any safety concerns brought forward by anyone at any time. S/he ensures that the appropriate communication tool is available and usable (phones, radios, etc.), and there is an updated staff and park contact list of office, cell, and home phone numbers. The Integrated Resource Manager ensures that one person is available for crew contact and communication while the crew is in the field. The Integrated Resource Manager works with the Safety Officer and other supervisors to ensure that incidents and accidents are properly reported and investigated in addition to contacting the park superintendent if an injury occurs in the park.

Safety Officer (NEPE staff) is responsible for communicating safety procedures to all staff as appropriate and seeks out information in response to safety concerns, reviews and recommends approval of documentation involving safety standards, and works with the Integrated Resource Manager to ensure that incidents and accidents are properly reported and investigated.

Project Lead (NEPE staff) provides oversight of the project. The project lead makes adjustments to the protocol to ensure employee safety and meet park safety guidelines while meeting protocol objectives/goals and communicates those to all parties as appropriate.

Agency Contact is the primary contact within a park or non-NPS site for the project. The agency contact coordinates with the project lead and/or field crew leader to identify any park specific safety procedures and helps to implement those procedures (i.e., provide field crew itinerary to law enforcement and instruction on park radio use). On occasion, the agency contact may serve as a back-up for the crew's daily check-in following check-in procedures as described in Section 6. For instance, if work is done at WHMI or Iwetemlaykin State Park, an agency contact person (from either of those places) at each site would be designated prior to field work.

Field Crew Leader is responsible for field logistics. In order to reduce the work load of the field crew so they can focus on the "job at hand" the field crew leader helps develop crew field schedules and makes arrangements for keys to gates and/or facilities and transportation of gear to the site as needed; ensures that itinerary is filed with the Integrated Resource Manager and agency contact in advance of park visit; sends daily check-in calls to agency contact, dispatch and NEPE staff as appropriate. The field crew leader is the NEPE staff person responsible for day-to-day communications as described under the communications section (chapter 5) of the plan while working away from the office and for making on the ground decisions as necessary.

All Employees must report accidents, injuries, or close calls to their supervisor and fill out the appropriate forms as soon as possible following the accident.

1.12 Communication Equipment

Employees traveling and working in the field must have immediate access to one or more of the following types of communication:

1.12.1 Cellular Phones

All government cell phones are programmed with emergency contacts, park headquarters/visitor center, and NEPE staff numbers. The loaner cell phones are kept in the Safety Officer's office when not used by field staff. Phones must start with a fully charged battery and battery chargers are available for multi-day trips. Staff can use their personal cell phones, but essential numbers must be programmed in them prior to field work.

1.12.2 Radios

NEPE requires use of a radio in the field and it may be the only method of communication. Radios should have a fully charged battery, programmed with park frequencies and access to radio call numbers. Spare radio battery, fully charged, or clamshell with fresh batteries (extended trip travelers should plan for additional spare batteries if needed).

Staff must understand its operation. Park supervisors will provide a quick lesson prior to lending you a radio. Since our portable radios are programmed to the frequencies for both United States Forest Service (USFS) administrative units with whom we have Memorandum of Agreements (MOU), rather than worry which park site is closest to which of their several repeaters, NEPE staff calling out for emergency response from the field can simply try each and see which one is received. The dispatcher will then relay the request for assistance to the nearest responder (i.e., sheriff or EMT).

A simple plain-English call-out (i.e., “Clearwater-Nez Perce dispatch, do you copy?”) is enough to begin the chain of communication for the response or assistance that is needed. As with any telephonic 911 communication, radio communication should be clear, concise, and brief. Let the dispatcher ask the questions, and be prepared to describe the precise location, emergency, and requested support.

The Resource Management Division also has digital two-way radios (Midland and Motorola brands) which can transmit and receive transmissions from each other. Their primary function is as a safety tool—they can facilitate logistical and emergency situations where communication between field crews is important. Crews should understand their operations and they should be charged in advance and/or extra batteries should be carried with each crew.

Field-Related Safety Procedures

1.13 Park Contacts and Field Visit Procedures

These procedures provide instructions to follow prior to, during, and after NEPE field operations (e.g., providing itinerary, obtaining access, returning keys, etc.).

1.13.1 Preparations

Project lead will prepare logistics with the help of the **field crew leader**.

At the time of field work, **field crew leader** will contact **agencycontact (or Natural Resource Specialist or Integrated Resource Manager)** to ensure all logistics have been taken care of.

1. **Field crew leader** will check on radio and cell phone (and chargers and extra batteries) availability, if needed, with **agency/park contact (or Natural Resource Specialist or Integrated Resource Manager)** prior to site visit. **Field crew leader** ensures all field crew members are instructed on radio use and call names.
2. **Field crew leader** will check on vehicles (including safety equipment in vehicles) and field equipment to ensure items are in proper working conditions.
3. **Field crew leader** will fill in the **travel itinerary board** in the Spalding visitor center and transmit a short itinerary email to the **agency contact and Integrated Resource Manager or Natural Resource Specialist** in advance of **the planned field work**. The itinerary defines the time period, geographic location, park vehicles/equipment to be used (i.e., trailer and UTV), and basic field plan, including alternative routes where applicable. If the itinerary changes, the **agency contact** must be notified via best available method. In some situations, visitor center staff will also be notified.

1.13.2 Arrival

To ensure safety of the field crew and maintain open communication with other park staff, NEPE field staff must adhere to the check-in procedures upon arrival at a park site (this refers to field work at BEPA, BIHO, and WHMI).

1. When arriving at a field unit during operating hours (see *NEPE and Park Safety Contact Information*), unless previously arranged the **field crew leader** will check-in with the **agency contact or appropriate contact (i.e., NPS park housing coordinator, resource management staff)** and obtain keys, park radios, or any further instruction as necessary.
2. **Field crew leader** will provide any last minute changes to the itinerary to the **agency contact**.
3. **Field crew leader** will confirm as needed the radio frequency for the NEPE field crew.
4. If arriving after hours, the **field crew leader** will contact the **agency contact** the next day or leave message for **agency/park contact** and provide a courtesy follow-up call. The information detailed above will also be provided.

Note: If a late arrival is anticipated, inform **agency contact** in advance if required.

1.13.3 During Site Visit

1. Each **field crew** will maintain an approved method of emergency contact at all times. Contact methods will be conveyed to park through itinerary communication via email or verbal communication.

2. The **field crew leader** will communicate regularly with the **designee or agency/park contact** as described in this plan. When doing so clearly and concisely communicate the following: a) specific location, b) confirm that all individuals in crew are accounted for, c) provide information on the crew's planned location for the work day and the intended and alternative travel route, and d) confirm the crew's intended end-point for the evening (campsite, if applicable) and the time they anticipate arriving to the end-point, e) request any known hazard information for the area (i.e., weather report, fire areas).

1.13.4 Departure

1. Before leaving the site, the **field crew leader** will check-in with the **agency contact as needed** to return keys, radios, and another other park loan items. It is understood that this may not be necessary each site visit.
2. Any unusual cultural, geologic, wildlife or floral sightings should be reported to the **agency contact** and **Natural Resource Specialist or Integrated Resource Manager**. Note: wildlife incidents [e.g., encounters, attacks, bites, etc.] should be reported as soon as possible. This can include encounters with people that seem out of character for the area.

6.1.5 Retrieving Messages

It is imperative to routinely check messages. Staying connected is paramount to a smoothly-run field work tour. For example, NEPE staff may have information of a work-related nature that could save crews much confusion; park personnel may have information regarding dangerous weather or forest fires in the vicinity of your work; or NEPE staff could simply have better route information acquired after crew departure that could be useful for efficient travel.

1.14 Communication with other Field Crews

Field staff are encouraged to communicate regularly while working in similar areas (i.e., to Exotic Plant Management Teams (EPMTs), research scientists, maintenance staff, etc.). In many cases, field staff may be able to coordinate logistics to facilitate the use of common equipment or vehicles.

Maintaining regular contact may also result in crews being available to assist one another in the unlikely event of a major medical emergency.

1. Field crew leaders will determine appropriate opportunities for convergence and for any regular communication with other field crews.
2. Communication between field crews will occur with the use of the cell phones, when possible (depending on the situation, this includes, SPAL, HEMO, WHMI, and OLJO). Either way, messages may be left and retrieved by using the appropriate functions with your telephone.
3. To relay messages of high importance, a field crew may use their park issued radio (if available) and request that dispatch attempt to contact another crew with information.

1.15 Foot-Travel Safety Practices

Many field study sites are located in somewhat remote areas and are accessed via foot-travel. Choose a safe route based on information provided, local knowledge, navigational tools, environmental conditions and other safety considerations. If conditions are not safe for travel, either postpone the activity or determine how to modify your travel plan to ensure safe travel.

Once you are on your way, safety practices for off-trail foot travel, especially for areas with steep slopes, rocky outcrops, hard surfaces, soft soil, wet vegetation, loose rock, mud, and needle cast, include:

- When traveling on foot in groups, the slowest hiker should set the pace of the group. No employee should ever become overexerted or isolated from the group.
- Stay in communication with other co-workers at all times.
- Monitor your travel on a map and note landmarks. Do not become solely dependent on GPS units.
- Constantly assess the terrain for hazards and plan ahead to avoid them by going around, over or under them.
- Rocky outcrops may not be visible on aerial photos and should be avoided.
- Adjust your walking pace to the terrain and place your feet carefully to maintain stable footing.
- Stay balanced by keeping weight over the arches of your feet while keeping your head as level as possible when you walk
- Maximize friction by applying maximum boot-sole contact to the ground.
- Use toe kicks or herring-bone footsteps when traveling straight uphill.
- Shorten stride when traveling uphill.
- Use the “rest-step” technique of taking a moment to breathe with your weight shifted to the downhill leg when traveling uphill on steep slopes.
- Traverse slopes on an angle where practical.
- Sidestep up or downhill where you can’t traverse, keeping the majority of your weight on your uphill foot.
- Consider using a walking stick or pole.
- Carry any tools or walking stick on the downhill side of your body.
- Do not rely on rock handholds to support your weight. Rocks may become loose, causing a serious fall.
- Test each step and establish stable footing.
- Keep knees slightly bent and shorten your stride when descending, particularly when the surface is slick.
- Wear gloves to grab onto stable vegetation to prevent hand punctures.

Carrying Loads During Foot Travel

- Distribute the load so the majority of the weight is in the center of your backpack and your pack balanced.
- Backpacks should be properly fit to each crew member.
- Be aware of the shift in your center of gravity due to the load you carry.
- Use proper lifting and ergonomic techniques while putting on and taking off your load/pack. Ask a co-worker for assistance.
- Keep at least one hand free while hiking to assist in regaining balance in case of a slip or fall.
- Do not carry awkward or unbalanced loads when walking these terrain types.
- Make sure backpacks are balanced with the center of gravity low to help with stability.
- Use hip belts when provided.

To avoid eye injuries due to twigs and branches:

- Avoid standing up too fast from a bent-over or crouched position.
- Consider wearing eye protection.
- Maintain adequate spacing from other individuals on brushy trails to avoid branches “whip lashing” into your face.

Employees are more vulnerable when they are distracted or fatigued. To avoid injury in this circumstance:

- Remain alert and observant. Be aware of your surroundings and alert for hazardous conditions.
- Focus on what you are doing at all times.
- Get adequate rest, including at least 6 hours of sleep during off-work hours.
- Take rest breaks as needed, at least 15 minutes for every 2 hours of strenuous activity.
- Dehydration can cause fatigue, so drink plenty of water before, during, and after the work day. The basic rule is to drink one liter of water or more for every one hour of strenuous work.
- Eat energy foods prior to getting hungry.
- Stretch during breaks to prevent muscle soreness and injuries.

Required Safety Training

Requirements for safety and health training for employees, supervisors, managers and occupational safety and health professionals working in the NPS are specified by the Occupational Safety and Health program and described in section 5.0 of the Safety Handbook (NPS n.d.). Safety training is designed to provide employees with the skills and knowledge to perform their work in a safe and healthful manner and to provide sufficient information for managers and supervisors to recognize and perform their responsibilities.

1.16 NPS Operational Leadership

Operational Leadership introduces employees to seven critical skills necessary to reduce the probability of human error. The principles of operation leadership empower employees to be assertive about their safety and the safety of their team and encourage employees to participate in the decision making and risk management process. Operational Leadership training is a requirement for all full time NEPE staff.

1.17 Employee orientation

A safety orientation program will be available to each new and returning employee to increase understanding of the NEPE policies and mission statements concerning employee safety and health and to learn about procedures that safeguards them in the performance of their assigned tasks. Topics for employee orientation (See also sections 5.1-2 Occupational safety and health training – Employee Orientation) that could be covered include:

- Safety and health program and policies
- Employee rights and responsibilities
- Applicable OSHA regulations
- Hazard identification and control
- Communication
- Hazard reporting process
- Incident reporting procedures
- Emergency response procedures
- Operational Leadership

1.18 First Aid

The Federal Code of Regulations (CFR) 1910.151 states that “all employees whose work assignment in the field places them beyond reasonable accessibility to a medical facility in terms of time and distance (15 minutes or 10 miles) must be trained to render first aid or be accompanied by someone who has a valid certificate in first aid and Cardio-pulmonary Resuscitation (CPR).”

NEPE currently requires all field crew leaders be certified in first aid and CPR. First aid and CPR certification is recommended for crew members and required for any individual working alone. Required training will be taught by a qualified instructor.

1.19 Orienteering

Supervisors must train employees and ensure they have skills necessary to navigate in the field using a map in addition to GPS navigation. Solely relying on a GPS unit is not recommended

because units can be lost, damaged, or run out of power; and potentially leads users into dangerous situations that could have been avoided by reading a map and the terrain.

1.20 Defensive driving

Training in defensive driving is required for all employees every three years. The National Safety Council Defensive Driving II class available on-line via DOILEARN is one option.

1.21 Radio use training

All field-going personnel are required to get some training with their supervisor. Natural resource staff will work with the Natural Resource Specialist or Integrated Resource Manager prior to the major field season.

Vehicle and Driving Safety

1.22 Preparations for a Safe Trip

Every NEPE vehicle contains the following:

- A NEPE Resource Management Safety Plan (this document), including the attachments, appendices, directions to hospitals, and park-specific policies.
- A first aid kit with supplies listed in Appendix E.
- Additional vehicle maintenance and safety equipment, including fire extinguisher, jumper cables, scraper, tire gauge, spare oil, OSHA approved safety vests.

1.22.1 Pre-Trip Vehicle Inspection Checklist

The field crew leader is responsible for ensuring the vehicle is inspected prior to the trip and upon return. This inspection verifies that the vehicle is working properly and is free of obvious safety hazards. Refer to the inspection checklist in the Vehicle Binder.

1.22.2 Vehicle Security

When leaving a work vehicle (NEPE or personal) unattended for any length of time, anywhere:

- Lock the vehicle and secure windows.
- Switch the fuel ignition “kill switch” if the vehicle has one.
- If parked on a grade set the emergency break and “chock” a wheel to prevent the vehicle from rolling. Remember to remove the chock when moving the vehicle.

1.23 Adverse Road Conditions

When traveling in hazardous conditions, all employees should stop and consider whether the travel is necessary. All employees have the right and the responsibility not to travel in dangerous conditions. Consider the following:

- Visibility may be low due to a dust storm, blowing snow, or fog.
- During winter roads may be icy and slippery.
- During any season roads may be muddy, slippery, or dusty.
- Use extra caution when driving on unpaved roads. Hazards include soft shoulders, falling rocks, and slick conditions when wet, especially on collapsed roadbeds.
- Driving slowly increases available reaction time.
- Washboard bumps can cause a vehicle to fishtail and lead to a loss of control.
- Switchbacks should be entered slowly and as far to the right as possible, as visibility of oncoming traffic is poor. Use headlights and tap the horn before entering blind switchbacks to alert other vehicles of your presence.
- Watch for changing weather, especially with a change of elevation.
- Afternoon thunderstorms are frequent in the summer and can create hazardous driving conditions. Avoid driving during these times or take extra precaution while driving under these conditions.

1.24 Driving Safety

Supervisors will determine an employee’s experience level in driving 4-wheel drive vehicles and driving in hazardous road conditions and will mentor and ensure employee training for the specific vehicle, locations and condition in which they will be driving. NEPE resource

management staff will participate in safety training to include, but not limited to, reviewing the NEPE JHA for driving safety. In addition, NEPE will:

- Empower staff to make driving decisions and not to drive if uncomfortable with the conditions.
- Have staff read through the July 17, 2012 briefing statement regarding the NPS 10-Driving Policy (see Vehicle Accident section of safety binder).
- Encourage employees to use a spotter when backing vehicles.
- Ensure government owned or leased vehicles are outfitted properly for driving in adverse conditions (snow tires, etc.).
- Have motor vehicle operator defensive driver training as part of the seasonal orientation.
- Remind employees that cell phone use and texting is prohibited while driving.
- Pull over and take a nap if tired while driving.

1.25 Reporting a Vehicle Accident

If you or other NEPE personnel are involved in a vehicle accident, follow the “Call, Contact, Care” emergency procedures if a medical emergency is involved. Instructions for reporting a motor vehicle accident are outlined in detail in the NPS Personal Property Management Handbook #44 (saved at W:\Safety\Resource_Management_Division\Vehicle_Accident) and relevant sections are included in the vehicle safety binder under the motor vehicle accident reporting section.

Operators of any government motor vehicle involved in an accident shall secure the site from further accident and immediately notify the direct supervisor to alert them of the motor vehicle incident and any relevant danger. If supervisor is unavailable contact the Integrated Resource Manager or Safety Officer. It is important to make sure you have verbally contacted one of these individuals.

If a Department of Interior vehicle is involved in an accident:

- Complete the Standard Form (SF)-91 Motor Vehicle Accident Report form and SF-94 Statement of Witness (if possible) located in the vehicle safety binder. These forms are also available as fill-in Portable Document Format (PDF) forms in the shared drive W:\Safety\Resource_Management_Division folder.

If a vehicle leased through General Services Administration (GSA) is involved in an accident:

- Contact the Accident Management Center (AMC) at 1-800-325-2958. The AMC has technicians trained in body damage repair, rental cars, towing, and accident reporting policy. The AMC’s job is to administer accident reporting procedures, process necessary documentation, bill the responsible party, and answer customer questions.

1.25.1 Roadside Breakdowns

Safety is always the first priority if your vehicle breaks down.

- Use your best judgment.
- OSHA approved safety vests are provided in all vehicles and will be worn at all times while working along the roadside.
- If you are in a hazardous spot get out as soon and as safely as possible.

- If the vehicle breaks down inside the park, contact the agency contact or park dispatch to inform them of your situation and be sure to follow-up with the field crew leader to notify him/her. Outside of a park, contact the field crew leader or designee to explain your situation. For emergencies outside of normal business hours, contact the Integrated Resource Manager, Natural Resource Specialist, Safety Officer, field crew leader, or designated contact.

Repairing the vehicle:

- If there is a minor problem that you feel comfortable fixing, do it, but make sure it's done correctly. If you are not sure of the problem, leave it for a mechanic to address.
- If the vehicle needs to be towed and you have access to a local company, have the vehicle towed to a safe location. Towing can be requested through park dispatch if the vehicle is within a park.
- Use the vehicle government credit card for towing and any necessary repairs. Volunteers (including cooperators signed up as a volunteer): if there is an NPS employee with you (from any park or location), ask him/her to sign the credit card paperwork; if not, you are authorized to sign this paperwork as a volunteer.

1.25.2 Law Enforcement Stops

As a government employee, cooperator, or citizen, you are expected to follow all traffic laws. If you are stopped by a law enforcement officer for any reason:

- Provide the officer with your driver's license.
- Government vehicles have no vehicle registration and title; vehicles are tracked by license plate numbers. If the officer is unaware of this policy, inform him/her cordially.
- Government vehicles have no insurance cards. The federal government is self-insuring.
- As early as possible notify the Integrated Resource Manager.
- You are personally responsible for the consequences of traffic law violations.

Chemical and Hazardous Material Storage

Chemicals stored in the Spalding, Idaho site of NEPE must be stored according to their Material Safety Data Sheet (MSDS) information. The MSDS sheets for all of the chemicals are kept in a marked folder at NEPE.

A list of all the chemicals must be posted on the outside of the storage container where they are stored (Table 1). This is done for the following reasons: (1) Emergency personnel are able to identify the contents in case of an emergency and (2) People who are sensitive to certain materials are able to avoid exposure. The list of chemicals should include: the name of the chemical, the number of that chemical in storage, and the number of that chemical that has been used (including anything that has been opened). One list must be in the lab and copies of this list must be given to the project leader and Integrated Resource Manager.

Table 1. Example chemical list to be posted on chemical storage container.

Water Quality Chemical List		
Solution	Size	Number in Storage Container
pH Buffer Solution 4	500ml	2
pH Buffer Solution 7	500ml	2
pH Buffer Solution 10	500ml	2
Deionized Water	4 L	1
Conductivity Standard 100	1 L	1
Conductivity Standard 1412	1 L	1
pH Electrode Solution	500ml	2
Turbidity Stablcal Formazin Standard <0.1 NTU	500 ml	2
Turbidity Stablcal Formazin Standard 20 NTU	500 ml	2
Turbidity Stablcal Formazin Standard 100 NTU	500 ml	2
70% Ethanol	1 L	1
**Unless otherwise noted all chemicals are in labeled storage container.		

All chemicals are required to have a Hazardous Material Identification Guide (HMIG) labels on each bottle to indicate hazards. The hazmat coordinator for the park is responsible for placing these labels on each chemical bottle and the superintendent and Safety Officer are responsible for ensuring that all chemical bottles are labeled correctly. If labels are not applied, it is an employee's responsibility to seek out the hazmat coordinator to complete this task.

Responding to an Incident

1.26 Responding to Medical Emergencies

A. Proper procedures for responding to any kind of medical emergency include:

1. Respond to the best of your abilities, ensuring your own safety first, before attempting to assist someone else.
2. Call 911 first in an emergency situation if you have cellular phone coverage. If you are away from cell towers, call through the radios. You will need to work with the associated dispatch to determine the best course of action for evacuating a patient.

When you contact dispatch, be prepared with the following information:

1. Your name
2. Your affiliation (NPS Nez Perce National Historical Park)
3. Location
4. Sex and age of patient (do not say patient's name over the radio)
5. Situation—signs, symptoms, what seems to be wrong
6. Patient vital signs (see NEPE Accident Log Form in vehicle safety binder or Medical Incident Size Up Card in first-aid kit. The card helps you evaluate a patient's airway, breathing, pulse, etc.)
7. Phone number

In the instance when there is no communication, you may need to go for help. If three total crew members are present, one person should stay with the patient and the other should go for help. Both parties should have some form of communication device. If only two people are present, the uninjured person should do what is possible to stabilize the injured person—make sure she/he has food, water, a communication device, and other emergency items in reach—before going for help. To help guide rescue efforts including aerial response, flag the area profusely prior to leaving and make sure you have the information needed to guide emergency assistance back to the injured person.

3. Contact Colleagues
 - a. Inform crew leader and crew members that you or someone with you is injured. Let them know if you are at risk. Describe potential risks for emergency responders.
 - b. Once emergency responders are underway and as soon as it is safely possible, inform the NEPE Integrated Resource Manager, supervisor, field crew leader, or Safety Office of the situation.
4. Monitor the patient while waiting for emergency responders.
 - a. Use Accident Log Form to communicate key information to emergency responders and keep the form for follow-up investigations.
 - b. Leave your phone or communication device powered on in case dispatch or someone else needs to contact you.
5. Position and wait. While waiting for emergency response, position yourself in an area that is safe and visible so that the rescue team can find you.
6. Get medical treatment. If a hospital visit is necessary, someone should go with the patient to the hospital. A coworker can help with paperwork, logistics, and morale.

When evacuation occurs, rely on emergency personnel to provide guidance on how uninjured crew members leave. Otherwise all crew members should leave the area when the patient is evacuated. If two crew members are present, the uninjured person should accompany the injured person to the medical facility and provide assistance as she/he is able. Regardless of the number of crew members, crews should maintain frequent contact with NEPE staff to provide updates and receive instruction.

Aerial evacuations may limit the number of persons who can ride on the aircraft. If some crew members are required to hike out, care should be used in determining the course of action. Work with dispatch and emergency personnel to determine the best course of action for all crew members.

B. Medical Forms

Accidents and/or injuries that occur on the job are reported either on government form CA-1 (Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation) or CA-2 (Federal Employee's Notice of Occupational Disease and Claim for Compensation) filled out on the Safety Management Information System (SMIS) website at: <https://www.smis.doi.gov>. The employee fills out the form online and the supervisor is notified by email that his/her portion of the claim is ready to be filled out. Once completed by the supervisor the claim is forwarded to the Pacific West Region claims coordinator who reviews and forwards the claim to the Office of Worker's Compensation Program (OWCP).

If injured, concern yourself with paperwork only once your condition has been stabilized. If your supervisor is not present, seek out assistance from other NEPE staff and complete as much of the paper forms listed below as you can (many of these can be completed and should be completed through the SMIS program).

1. Paper forms are located in each vehicle's safety binder which includes the NEPE Safety Plan.
2. A compensation form must be completed, either a CA-1 or CA-2. Each form has sections for you, a witness and your supervisor.
3. You must have your supervisor authorize medical treatment and complete a CA-16 form (Authorization for Exam/Treatment) AND you submit this completed form to the Medical Provider. **If the official supervisor is unavailable, your field crew leader may authorize treatment.**
4. Provide the OWCP1500 "Health Insurance Claim Form" to your provider, though they may not use it.
5. If your injury requires time off work, ask the physician to fill out the CA-17 form, which indicates what activities you may or may not perform while on duty. Note: Have your supervisor or work leader fill out the first portion of the CA-17 describing what activities are a normal part of your job. The treating physician should then complete the second portion of the CA-17.
6. For clarification, refer to CA-10 "What a Federal Employee Should Do When Injured At Work."

C. Reporting

1. Contact your supervisor and field crew leader as soon as possible to communicate the medical emergency. Inform coworkers immediately if they too may be at risk.
2. Report all incidents of any type to the program manager (near misses, injury, accident, disease, or other incident threatening someone's safety) even if they do not involve NEPE personnel (e.g., witnessed injury to park visitor).
3. For additional reporting guidance, refer to NPS Director's Order #50B (NPS 2008) and NPS Reference Manual #50B: Occupational Safety and Health Program.
4. As early as possible, it is important that the Integrated Resource Manager or his/her designee contact the park Safety Officer and Superintendent if an injury happened in a park, or contact the agency contact if on non-NPS property.

1.27 Lost coworker(s)

Working alone in the field may be allowed if authorized by the Integrated Resource Manager or delegate. If it is necessary for a person to work in the field alone, this person must:

- Carry reliable communication equipment.
- Communicate with others throughout the day about where she/he will be working, planned travel routes, and where and when to rendezvous with the rest of the crew or return to the duty station.

If a person fails to communicate or return to a rendezvous point within 30 minutes of the designated time:

1. Attempt to contact the overdue person on the phone or radio.
2. If this effort is unsuccessful, and searching is deemed necessary, notify NEPE personnel and the agency contact prior to beginning the search.
3. Begin searching where the person was known to be working, using the travel route the person was taking.
4. If the person is not located within 2 hours or before dark, contact park or local emergency responders. Emergency responders will contact park officials who will determine when to initiate search and rescue operations.

If you are working alone and get lost or injured:

1. Stay as close as possible to the area you are supposed to be. Stay put and wait for others to assist you. If possible, flag your location to draw the attention of searchers.
2. Continue attempts to contact the rest of the crew, NEPE staff, or park and local emergency personnel.

1.28 Responding to a Non-Emergency Medical Incident

If a crew member receives an injury that is not a medical emergency, the severity of the injury will determine the cause of action. First, the injury should be treated. The crew leader and the injured party should confer to determine whether the injured person can continue work or will use sick leave. Notify the field crew leader as early as possible describing the injury. If the injury requires time off work, notify the NEPE Integrated Resource Manager promptly.

Paperwork (CA-1) should be filled out for all but the smallest scratches and bruises by the end of the day of the injury if possible or as soon as feasible when you have returned from the field.

Even if a claim is not immediately (or ever) filed, it is necessary to later establish that the incident leading to debilitation (if any) occurred while performing official duties. Although paperwork is not required for minor scratches and bruises, these incidents and any “close calls” should be reported to your supervisor by the end of the field trip.

Follow all Motor Vehicle Accident Reporting requirements which pertain to both emergency and non-emergency vehicle incidents.

1.29 Responding to a vehicle incident involving a Medical Emergency

If you or other NEPE personnel are involved in a vehicle accident, immediately seek appropriate medical care if needed. Care for injuries by getting prompt medical treatment. Call 911 first if the situation warrants. All injuries that warrant compensation require CA-1 paperwork to be filled out, preferably on the day of the accident. Follow all Motor Vehicle Accident Reporting requirements which pertain to both emergency and non-emergency vehicle incidents.

1.30 Responding to a Park Visitor’s Medical Emergency

No one on the NEPE staff has a medical position (i.e., no staff have medical treatment in their job description); consequently, employees are not required to render any first aid or medical assistance to a park visitor, park staff, or even to someone on a NEPE field crew. NEPE supports first aid and safety training as a way to educate employees on the potential risks of your job and steps you can and should take to prevent injury to you and your colleagues. However, choosing to lend aid is ultimately and always your personal decision.

Unless emergency personnel are on scene or have been notified for response, take the necessary actions to notify emergency personnel about the incident. Be able to provide the location of the incident, number of individuals involved, seriousness of the injuries if possible, and if there are any hazards that emergency personnel need to be aware of when responding on scene (e.g., fuel spills, fires, and wounded wildlife). You are required to stay on scene, unless your own safety is in jeopardy, until released by responding emergency personnel.

Good Samaritan Laws are in effect in Idaho, Oregon, Washington, and Montana. These laws indicate that no person who administers emergency care in good faith at or near the scene of an emergency will be held liable for any civil damages as a result of any action or omission by the person administering care, except for gross negligence, provided that the care is rendered without remuneration (wages or salary) or expectation of remuneration. However, someone who knowingly provides care that exceeds their level of training, even if they are not actually negligent, could be liable even under Good Samaritan protection.

1.31 Responding to non-malicious and/or malicious illegal activity

Should you encounter *non-malicious* (and perhaps unintended) unlawful activity (e.g., picking wildflowers, hiking off-trail, unleashing dogs), you may choose your course of action which will depend upon your situation. You may decide to kindly explain to the visitor that the activity is not permitted and/or report the activity to the Superintendent.

Should you encounter *intended and/or malicious* illegal activity (or anywhere, while on or off the job), you must rely on common sense and instinct to react appropriately and safely. Animal

poaching, driving motorized vehicles in a non-motorized area and relic collecting are among a myriad of possible illegal activities you could encounter on federal lands. The best course of action in all such situations is to avoid contact, leave the area, and call law enforcement or 911 immediately. Contact information for each park site is located in 'park contact' information sheet provided in the vehicle safety binder.

The potential for encountering unlawful and/or dangerous behavior is more likely in areas that are accessible by vehicle. Extra attention to situational awareness to identify, evaluate and comprehend what is happening around you is an essential element to managing such risks.

Safety Incentive Program

Recognition of achievement in occupational and visitor safety and health is important at NEPE and an essential element in maintaining team effectiveness. NEPE maintains an employee award system to recognize employee efforts to improve the safety and health in the workplace. The safety incentive program recognizes annually or more often, safety excellence for individuals.

The safety incentive program rewards employees who demonstrate a safe work environment by:

- Providing safety training and equipment for employees
- By watching out for one another on the job
- By identifying hazards and mitigating them, and
- By allowing any employee to stop work if they feel that any situation is unsafe or they are in imminent danger.

Awards are divided into three categories:

1. On the spot award (non-monetary)
2. Standard Level Award (to be determined by park Superintendent)
3. High Level Award – (to be determined by park Superintendent)

Any employee can present an on-the-spot award to recognize everyday actions by individuals that enhance the safety and health of others.

Anyone may nominate individuals for standard and high level awards. These nominations should be forwarded to the NEPE Integrated Resource Manager and NEPE Safety Officer for consideration. The Superintendent/supervisor will have discretion to offer larger cash or time-off awards as warranted. Volunteers will be recognized with non-monetary awards of lasting value for all levels as they are ineligible for cash awards in accordance with Director's Order 7.

Information Resources

1.32 Policy and Regulation

Director's Order #50: Occupational Safety and Health Program.
<http://www.nps.gov/policy/DOrders/50B.htm>.

Occupational Safety and Health Program Reference Manual 50B.
<http://inside.nps.gov/waso/custommenu.cfm?lv=2&prg=46&id=5898>.

NPS Safe program
<http://inside.nps.gov/waso/waso.cfm?prg=646&lv=3>.

NPS Safe program - NPS Employee Safety & Health Implementation Plan of March, 2004:
<http://inside.nps.gov/waso/custommenu.cfm?lv=3&prg=646&id=2341>.

1.33 Accident and injury reporting

Accidents and/or injuries that occur on the job are reported on government form CA-1 or CA-2 filled out on the SMIS website at: <https://smis.doi.gov>. The employee fills out the form online and the supervisor is notified by email that his/her portion of the claim is ready to be filled out. Once completed by the supervisor the claim is formed to the PWR claims coordinator who reviewed and forwards the claim to the Office of Worker's Compensation Program (OWCP).

1.34 Network and agency resources

NEPE Safety plan and other safety documents can be located at:
W:\Safety\Resource_Management_Division

USGS National Field Manual, Chapter A9, "Safety in field activities," by Susan L. Lane and Ronald G. Fay (10/1997) at: <http://water.usgs.gov/owq/FieldManual/Chap9/chap9.pdf>.

Revising this Plan

NEPE staff member(s) will conduct an annual review of this and associated documents and relevant resource documents, compose the revisions necessary to keep these documents current, and promptly distribute revised versions to the staff along with a written revision summary of changes (see the Revision History Log in this document). This review will occur by the end of each calendar year, unless circumstances such as a serious deficiency warrant immediate revision. Frequent review and distribution of revision information keeps NEPE employees and cooperators aware of changes in conditions and policies that may impact their work in NEPE parks.

References

- National Park Service (NPS). 1997. General management plan/Environmental Impact Statement for Nez Perce National Historical Park and Big Hole National Battlefield. USDI, National Park Service, Washington, D.C.
- National Park Service. 2008. Occupational Safety and Health Program. NPS Director's Order #50B. Located at: <http://www.nps.gov/applications/npspolicy/DOrders.cfm>.
- National Park Service. 2009. Personal Property Management Handbook #44. Release 6 dated Jan. 2009.
- National Park Service . n.d. Safety and Health for Field Operations, Addendum to RM 50B Occupational Safety and Health Program. Washington, D.C.: U.S. Department of Interior, National Park Service. 224 p.
- Upper Columbia Basin Network. 2011. Safety Plan for the Upper Columbia Basin Inventory and Monitoring Network. National Park Service, Upper Columbia Basin Network, Moscow, ID.

Revision History

Previous Version #	Original Author(s)	Revision Date	Revision by:	Changes Made	Reason for Change	New Version #
1.0		mm/dd/yyyy	Full name			

Contact Information

Nez Perce National Historical Park
National Park Service
39063 US Highway 95
Lapwai, Idaho 83540

Tami DeGrosky, Superintendent
(208) 843-7011
(208) 413-6224 (home)
Tami_DeGrosky@nps.gov

Scott Eckberg, Safety Officer
(208) 843-7051
(509) 758-6077 (home)
Scott_Eckberg@nps.gov

Jason Lyon, Integrated Resource Manager
(208) 843-7017
(208) 669-1867 (cell)
Jason_Lyon@nps.gov

Jannis Jocius, Natural Resource Specialist
(208) 843-7048
(408) 386-1296 (cell)
Jannis_Jocius@nps.gov

Attachments

Injury reporting forms are filed at this location:

W:\Safety\Resource_Management_Division\Accidents_Injury_Forms

CA-1 - Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation

CA-2 - Federal Employee's Notice of Occupational Disease and Claim for Compensation

CA-16 - Authorization for Examination And/Or Treatment

CA-17- Duty Status Report

OWCP- 1500. Health Insurance Claim Form

OSHA 300 - Accident Log Form

Vehicle Accident reporting forms are filed at this location:

W:\Safety\Resource_Management_Division\Vehicle_Accident

[SF94](#) Statement of Witness

[SF91](#) Motor Vehicle Accident Report form

Radio Information can be found at this location:

W:\Safety\Resource_Management_Division\Radios

USFS and NEPE Radio Frequencies

Vertex Standard Radio Specs

SPE and GAR information can be found at this location:

W:\Safety\Resource_Management_Division\SPE_and_GAR_information

GAR Model Worksheet

SPE Worksheet

Emergency Evacuation Instructions can be found at this location:

W:\Safety\Resource_Management_Division\Emergency_Evacuation_Instructions

Emergency Evacuation Instructions BIHO

Emergency Evacuation Instructions NEPE-Weippe

Emergency Evacuation Instructions WHMI

Tailgate Talks can be found at this location:

W:\Safety\Resource_Management_Division\Tailgate_Talks

JHAs can be found at this location:

W:\Safety\Resource_Management_Division\Job_Hazard_Analysis-JHA

Appendix A— Job Hazard Analysis for Nez Perce National Historical Park

JOB HAZARD ANALYSIS (CERTIFICATION OF HAZARD ASSESSMENT - 29 CFR 1910.133)		JOB ACTIVITY: DATE: PREPARED BY: CERTIFIED BY:	
U.S. National Park Service			
PERSONAL PROTECTIVE EQUIPMENT REQUIRED:		QUALIFICATIONS, EXPERIENCE, OR TRAINING REQUIRED:	
BASIC JOB STEPS	HAZARDS	SAFE JOB PROCEDURE	
Break work down to basic elements (such as remove, lift, carry, stop, start, apply, return, squeeze, weld, saw, walk, hold, grind, place, etc.). Describe what is done, not how it is done.	For each job step, state what accident could occur and/or what hazard is present. To determine this, ask yourself if the person could fall; overexert; be exposed to burns, fumes, rays, gas, etc.; hit against, be struck by, come in contact with, be caught in, on, or between something?	State how each element of work should be performed to prevent the accident or avoid the hazard. What should the person do or not do? Be specific. What precautions should be taken? Ask yourself what you can do to eliminate, modify, guard, identify, or protect against the potential hazard or accident, including such things as how the worker stands, holds, uses, carries, dresses, etc.	

Appendix B—Personal Safety Reference

There is no job or task which is so important that required time and resources cannot be dedicated so that it may be performed safely.

1. What is Personal Safety?

In this context, personal safety refers to health issues that, although enabled by environmental conditions, are usually fully preventable through personal awareness and action.

2. Nutrition Problems

Nutrition issues are controlled by balancing adequate hydration with consumption of salts and sugars. In addition to dehydration and hyponatremia, one should also be aware of their daily caloric intake while out in the field. Consuming too few calories can lead to low blood sugar (hypoglycemia), a condition common to those who work long hours outside in difficult conditions. When you're your blood sugar levels drop too low you may feel shaky, weak, confused, irritable, hungry, or tired. If you experience any of these symptoms you should stop what you are doing if it is safe to do so and have something to eat, preferably something with a higher sugar content. Depending on your body's metabolic process and your level of activity, the number of calories you should consume may vary. Table 1 provides daily caloric intake guidelines based on gender, age and level of activity taken from the HHS's and USDA's "Dietary Guidelines for Americans 2005."

Table 1. Estimated caloric requirements (in calories per day) for each gender and age group at three levels of physical activity (USDA 2010a).

Gender	Age	Level of Activity		
		Sedentary	Moderately Active	Active
Female	19-25	2,000	2,200	2,400
	26-50	1,800	2,000	2,200
	51+	1,600	1,800	2,200
Male	19-40	2,400	2,800	3,000
	41-60	2,200	2,600	2,800
	61+	2,000	2,400	2,600

If you are diabetic, your daily caloric requirements will vary. You should consult with your physician about what you should eat and how much based on your personal nutrition needs. Taking the time to give your body adequate nutrition throughout the field day is an important part of staying healthy and getting the job done.

3.1. Dehydration

Lack of water and exposure to sun and heat are big hazards to health in the desert. Water accounts for about one half to two thirds of an average person's weight, so it is important to keep yourself properly hydrated. Signs and symptoms of dehydration include: headache, stomach ache, loss of appetite, sleepiness, nausea, dizziness, difficulty in breathing, tingling of the legs and arms caused by poor circulation, indistinct speech and finally, an inability to walk. Still, 10% dehydration generally causes no permanent ill effects. When dehydration exceeds 10%, you will become delirious, spastic, almost deaf, and barely able to see. The skin shrivels and becomes numb. At temperatures above 90°F, dehydration over 15% is generally fatal. At 85°F and less, the body can stand up to 25% dehydration. Dehydration is

cured and prevented primarily by drinking water but other beverages such as energy drinks and juice will work too. Your body can only process a liter of water per hour, so it is important to drink small amounts regularly to keep your body adequately hydrated. Limiting your consumption of caffeinated beverages (coffee, tea, energy drinks, soda, etc.) is also important in preventing dehydration. Caffeine is a diuretic which causes your kidneys to excrete fluid at a more rapid rate. This can result in more frequent urination and as a result, an increase in the rate of fluid loss.

To avoid dehydration:

- Drink 8-16 ounces of water before beginning work.
- Take frequent drinks during each hour of work. Refer to Table 2 for guidance on the quantity of water that should be consumed each day.
- Drink as much as possible during meals.
- Continue replacing fluids throughout the evening.
- Limit drinks that contain caffeine (including energy drinks) and alcohol.

Table 2. Guidelines for water requirements at three levels of physical activity.

Activity	Typical Duties	Quarts (liters) per day at temperatures:	
		< 80°F (26°C)	> 80°F (26°C)
Light	Desk work, camp-related activities	6	9
Moderate	Hiking	9	12
Heavy	Strenuous work	12	15

3.1. Hyponatremia

A low sodium level (hyponatremia) may result from not consuming enough sodium in the diet, excreting too much sodium (in sweat or urine), or being over-hydrated. Sometimes called "water intoxication," it is the opposite of dehydration, and is often associated with long-distance sporting events such as running and cycling. Though less common than dehydration, it is not an unusual problem and you can become hyponatremic in just a few hours. Symptoms are similar to dehydration (apathy, confusion, nausea, and fatigue), although some individuals show no symptoms at all. If untreated, hyponatremia can lead to coma and even death. As you consume large amounts of water over the course of a day your blood plasma (the liquid part of blood) increases in volume, thereby diluting your blood's salt content. At the same time, your body also loses salt by sweating. Subsequently, the amount of electrolytes available to your body tissues decreases over time to a point where that loss interferes with brain, heart, and muscle function. Hyponatremia is easily averted by eating food (especially salty foods) while adequately hydrating your body with water. Substituting electrolyte drinks (Gatorade, EmergenC, etc.) for water occasionally throughout your day is another easy way to maintain your salt intake and electrolyte levels while keeping your body hydrated. Electrolyte drinks should only be taken with equal amounts of water to prevent hyponatremia, which can lead to unconsciousness and convulsions.

3. Heat and Sun Exposure

There are many different types of heat exposure and severity. There is no lack of sunshine in the Upper Columbia Basin Network so you should always be aware of exposure dangers. Individual differences in heat tolerance are related to fitness, hydration, illness, drugs or medication, and fatigue. Fit individuals acclimate twice as fast as unfit individuals. Review for guidance on likelihood of experiencing heat stress at varying temperature and humidity levels.

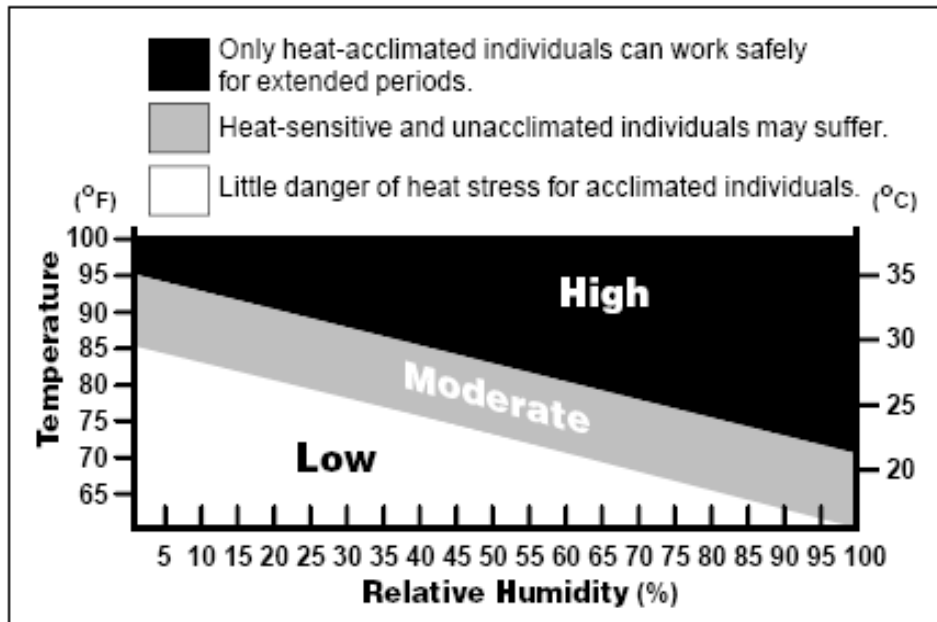


Figure 1. Heat stress chart developed by U.S. Department of Agriculture Wildland Fire Safety (USDA 2010b).

3.1. Preventing Overheating and Excessive Sun Exposure:

- Always have an adequate supply of water available and ensure that everyone is getting needed liquids.
- Schedule the hardest work during the cooler hours of the day.
- Set a moderate work pace.
- As the temperature increases, stop frequently for rest periods of at least 15 minutes. Relax in a cool or shady location, if possible.
- Prevent sunburn by keeping as much of your body covered as possible. Roll down your sleeves, button your collar and turn it up around your neck, and keep your head covered.
- Use sunblock on any area of your body that is not covered with clothing. Sunblock/sunscreen/suntan lotion partly blocks UV rays. Most products contain an SPF rating that describes the amount of protection given. This protection factor, however, applies only to UVB rays responsible for sunburn and not to UVA rays that penetrate more deeply into the skin and may also be responsible for causing cancer and wrinkles.
- What to look for in sunscreen:
 - o UVB protection: Padimate O, Homosalate, Octisalate (octyl salicylate), Octinoxate (octyl methoxycinnamate)
 - o UVA protection: Avobenzone
 - o UVA/UVB protection: Octocrylene, titanium dioxide, zinc oxide, Mexoryl ecamsule)
- Light-colored or white clothing is best to prevent overheating because it reflects light rays (heat energy), whereas black or dark-colored clothing absorbs it. However, dark-colored clothing provides more sun protection than light colors by preventing more UV rays from reaching your skin. On sunny days where temperatures are not excessively high, dark clothing may be preferred. On sunny days with high temperatures, sun protective clothing may be the best option. Clothing with a "UPF rating" describes the protection given against both UVA and UVB. Where sun protective clothing is not an option, one should apply sunscreen underneath light-colored clothing to further protect against UV rays.
- Keep your clothing loose and flapping; squirt water on your clothing to induce evaporative cooling.

- Do not disrobe when hot; by removing your clothing, your perspiration will evaporate more rapidly, and you will lose its cooling effects. Rapid evaporation of perspiration speeds up the process of dehydration.

3.2. Heat Stroke

Heat stroke is the most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached. The main sign of heatstroke is an elevated body temperature—generally 105°F or higher. A heat stroke victim's skin is hot, red or spotted and usually dry (although in heatstroke caused by exertion, the skin is usually moist). The victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur.

Any person with signs or symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes moving the victim to a cool area, thoroughly soaking their clothing with water, and vigorously fanning the body to increase cooling. Further treatment at a medical facility should be directed to the continuation of the cooling process and the monitoring of complications which often accompany the heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

3.3. Heat Exhaustion

Heat exhaustion includes several clinical disorders having symptoms which may resemble the early symptoms of heat stroke. Heat exhaustion is a serious heat illness, and if left untreated may progress to heatstroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.

In most cases, treatment involves having the victim rest in a cool, shaded place while drinking cool (not iced) water, or a sports drink containing electrolytes. Victims with mild cases of heat exhaustion usually recover quickly with this treatment. However, with more severe cases it may be necessary to lie the person down and elevate the legs and feet slightly and/or spray them with cool water and fan them. Those with severe cases may require extended care for several days. There are no known permanent effects.

CAUTION: Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.

3.4. Heat Cramps

Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. Drinking large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relieved by taking salted liquids by mouth, such as a sports beverage. If you are treating someone with heat cramps, the cramps may be relieved by lightly stretching the affected muscles while the person is lying down and in between drinking. Hold the stretch for about 20 seconds then gently massage the cramped muscle. Repeat this as necessary to relieve the pain.

CAUTION: Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.

3.5. Fainting

A worker who is not accustomed to hot environments and who stands erect and immobile in the heat may faint. With enlarged blood vessels in the skin and in the lower part of the body due to the body's attempts to control internal temperature, blood may pool there rather than return to the heart to be pumped to the brain. Upon lying down, the worker should soon recover. By moving around, and thereby preventing blood from pooling, the patient can prevent further fainting.

3.6. Heat Rash

Heat rash, also known as prickly heat, is likely to occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation and the skin remains wet for long periods of time. The sweat ducts become plugged, and a skin rash soon appears. Heat rash looks like a red cluster of pimples or small blisters and is more likely to occur on the neck and upper chest, in the groin, under the breasts and in elbow creases. When the rash is extensive or when it is complicated by infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin. If a heat rash develops, quickly move to a cool, less humid environment if possible and keep the affected area dry. Dusting powder may be used to increase comfort. Treating heat rash is simple and usually does not require medical assistance.

3.7. Transient Heat Fatigue

Transient heat fatigue refers to the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly susceptible and can suffer, to varying degrees, a decline in task performance, coordination, alertness, and vigilance. The severity of transient heat fatigue will be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).

4. Cold Exposure

4.1. Hypothermia

Hypothermia is a condition where exposure to cold stress overwhelms the body's ability to maintain its core temperature above 95°F. Hypothermia can be dangerous because desert temperatures fluctuate dramatically. For example, temperature fluctuations of 20- 40°F over a 24-hour period are common. Temperature swings of 30°F occur within a few minutes during monsoon season. During the winter, temperatures in the mountains can dip well below freezing.



Wind Chill Chart

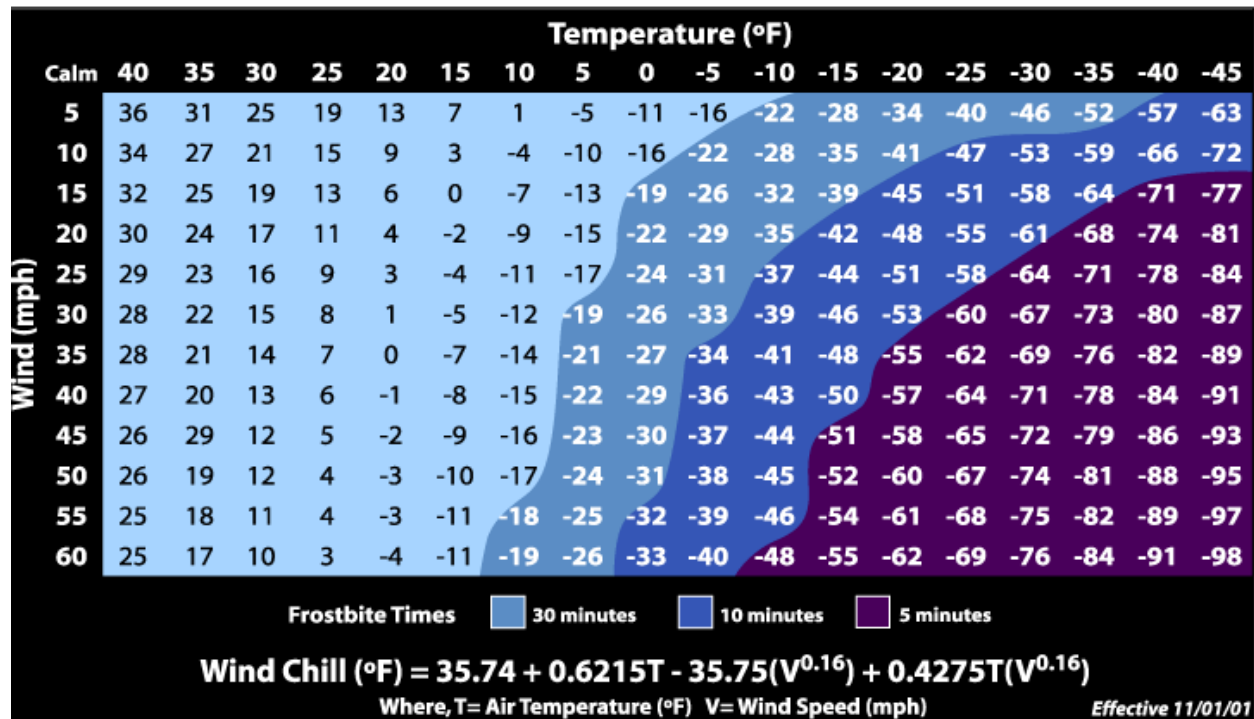


Figure 2. Wind chill chart showing points where temperature, wind speed, and exposure time will likely produce frostbite on humans (NOAA 2001).

Remember, temperatures do not even have to be close to freezing to be concerned about hypothermia, any condition that cools your body faster than it can warm itself can potentially cause hypothermia. Colder temperatures, wet conditions, and wind are all factors to consider when determining how to properly protect yourself against hypothermia. Wind especially can significantly reduce the temperature and quicken the onset of hypothermia and frostbite (**Error! Reference source not found.**). For example, a temperature of 0°F and a wind speed of 15 mph will produce a wind chill temperature of -19 °F. Under these conditions, exposed skin can freeze in 30 minutes.

The body's two main responses to cold are decreasing circulation to extremities and shivering to increase metabolism. However, the symptoms of hypothermia depend on how cold the environment is and how long the victim is exposed for. In mild cases, symptoms include: shivering, feeling cold, low energy and cold, pale skin. The symptoms of moderate hypothermia include: violent, uncontrollable shivering, confusion, loss of judgment and reasoning, drowsiness, clumsiness, slurred speech, a weak pulse, and slow, shallow breathing. Symptoms of severe hypothermia include: loss of control of hands, feet, and limbs, shivering stops (but victim has not warmed), unconsciousness, shallow or no breathing, weak, irregular, or no pulse, stiff muscles and dilated pupils.

To avoid cold exposure:

- Be alert to changes in weather (especially in monsoon season).
- Always anticipate bad weather. Carry additional warm clothing with you, take adequate garments for all possible weather conditions (in fall and autumn the days can be hot and the nights cold, the drastic drop in temperature that follows sun down and can easily lead to hypothermia).

- Dress for the conditions in layers of loose, dry clothes: polypropylene or wool underneath, with windproof and waterproof material on top. Ensure that your hands, feet, face, neck, and head are covered and well protected.
- Get plenty of rest.
- Keep active to maintain the body's metabolism and keep your body temperature high.
- Prevent dehydration by drinking warm water. Avoid drinking cold water, snow, or ice. Avoid caffeinated beverages.
- Set up camp early and prepare for dropping night temperatures. Find shelter and firewood before dark.
- Eat balanced meals and high energy snacks.
- Monitor yourself and others for symptoms of hypothermia.

If you or someone else develops hypothermia while out in the field there are certain things that should and should not be done to treat the victim. In general:

- Move the person out of the cold. Preventing additional heat loss is crucial. If you're unable to move the person out of the cold, shield the person from the cold and wind as best you can.
- Remove wet clothing. If the person is wearing wet clothing, remove it and replace it with a dry covering. Cover the person's head. Try not to move the person too much. Cut away clothing if you need to.
- Insulate the person's body from the cold ground. Lay the person face-up on a blanket or other warm surface.
- Monitor breathing. A person with severe hypothermia may appear unconscious, with no apparent signs of a pulse or breathing. If the person's breathing has stopped or appears dangerously low or shallow, begin cardiopulmonary resuscitation (CPR) immediately if you're trained.
- Share body heat. To warm the person's body, remove your clothing and lie next to the person, making skin-to-skin contact. Then cover both of your bodies with a blanket.
- Provide warm beverages. If the affected person is alert and is able to swallow, have the person drink a warm, nonalcoholic beverage to help warm the body.

What not to do:

- Don't apply direct heat. Don't use hot water, a heating pad or a heating lamp to warm the person. Instead, apply warm compresses to the neck, chest wall and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop. This can be fatal.
- Don't massage or rub the person. Handle people with hypothermia gently because they're at risk of cardiac arrest.
- Don't provide alcoholic beverages. Alcohol lowers the body's ability to retain heat.

By following these guidelines it is highly likely that a victim will be able to recover from mild hypothermia. In moderate to severe cases, the victim should be taken to the hospital to be assessed and you should contact your supervisor or someone in the office to inform them of the situation. If you are unable to move the victim (as with severe hypothermia) you should call 911 for ambulance assistance and contact your supervisor right away.

The best way to prevent becoming chilled and developing hypothermia is preparation. The body loses heat in several ways, so it is important to protect yourself accordingly. Fifty-five-65% of your body heat is lost to the environment via radiation (with most heat lost through the head), so carry a hat, sweater, windbreaker, or blanket and layer your clothing to best protect yourself against this type of loss. Twenty-27% is lost as a result of evaporation from the skin and lungs, so layering your clothing is the best option

as the layers trap the warm air and prevent it from moving to the outside. Conduction only accounts for 2-3% in dry conditions, but this figure can increase to 50% if the victim is immersed in cold water, so you should remove any of your clothing that becomes wet or damp and replace it with dry clothing if at hand.

4.2. Frostbite

Frostnip and frostbite are stages of cold exposure in which only the skin, but no deeper tissue, freezes. Frostnip is the first stage in which the skin turns pale or discolored and the victim experiences burning and/or tingling sensations in the affected area. Frostnip can usually be treated by rubbing or putting the body part into a warm place. Frostbite occurs when the skin actually freezes and turns a purple color as it is thawed. In superficial frostbite, you may experience burning, numbness, tingling, itching, or cold sensations in the affected areas and the regions appear white and frozen. Treat frostbite by steady application of warmth and obtaining medical attention. Deep Frostbite goes deeper into the body, affecting muscles, tissue, blood vessels, and sometimes organ membranes. In deep frostbite, there is an initial decrease in sensation that is eventually completely lost. Swelling and blood-filled blisters are noted over white or yellowish skin that looks waxy and turns a purplish blue as it re-warms. To treat deep frostbite, DO NOT rub or apply ointments or snow to affected areas. Simply cover with dry clothing and get to a hospital ASAP. Distinguish the much more serious deep frostbite from superficial frostbite by pushing down with a finger to feel if tissue under the skin feels frozen or pliable.

Before anticipated prolonged exposure to cold, one should not drink alcohol or smoke, and get adequate food and rest. Multiple layers of clothing, especially wind and water-proof synthetic fabrics, are the best protection against frostbite. Gloves and a hat that covers the ears are especially important. You should also avoid wearing fabrics like cotton, which retain moisture.

5. Back Safety

Statistically, one in every five people will experience a back injury in his/her lifetime, and four out of five adults will have at least one bout of back pain in their lifetime. Back pain is one of the most common reasons for health care visits and missed work. Back injuries most often result from improper posture (results in strained back muscles and ligaments), from improper or heavy lifting, or after a sudden awkward movement. A combination of exercises that don't jolt or strain the back, maintaining correct posture, and lifting objects properly can help prevent injuries. Follow the guidelines below to prevent a painful back injury, both in the field and in the office.

5.1. Exercising

- Regular low-impact aerobic activities — those that don't strain or jolt your back — can increase strength and endurance in your back and allow your muscles to function better.
- Speed walking, swimming, or stationary bike riding 30 minutes a day can increase muscle strength and flexibility.
- Abdominal and back muscle exercises (core-strengthening exercises) help condition these muscles so that they work together like a natural corset for your back.
- Ask your physician or orthopedist for a list of low-impact exercises appropriate for your age and designed to strengthen lower back and abdominal muscles.

5.2. Posture

- Don't slouch when standing or sitting. When standing, keep your weight balanced on your feet. Your back supports weight most easily when curvature is reduced.
- At home or work, make sure your work surface is at a comfortable height for you.
- Sit in a chair with good lumbar support and proper position and height for the task. Keep your shoulders back. Switch sitting positions often and periodically walk around the office or gently stretch muscles to relieve tension. A pillow or rolled-up towel placed behind the small of your back can provide some lumbar support.

5.3. Lifting

Prepare for the lift

- Survey the route: Make sure the path is clear of obstructions or hazards such as spills or slanted or uneven surfaces.
- Size up the load: If the load is too heavy or too bulky divide the load, get help, or use a dolly or other material-handling device.

Making the lift

- Get as close as you can to the object.
- Squat down, bending your knees. Keep your back straight, your head up.
- Tighten the abdominal muscles and lift with your legs.
- When carrying an object, keep it as close as possible to your body.
- If you have to turn, pivot your feet before you move in another direction, do not twist at the waist.

How not to lift

- Avoid sudden moves.
- Don't twist your body.
- Don't bend at the waist.
- Don't reach away from the body to lift.
- Don't lift objects over your head.

References

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US Department of Agriculture (USDA), Center for Nutrition Policy and Promotion. 2010a. Report of the dietary guidelines advisory committee on the dietary guidelines for Americans, 2010. Available online at: <http://www.cnpp.usda.gov/DGAs2010-DGACReport.htm> (December 14, 2010).

US Department of Agriculture (USDA), Fire and Aviation Management. 2010b. Wildland Fire Safety Heat Stress Brochure. Available online at: http://www.fs.fed.us/fire/safety/fitness/heat_stress/hs_pg4.html (December 14, 2010).

Appendix C—Potential Environmental Hazards

There is no job or task which is so important that required time and resources cannot be dedicated so that it may be performed safely.

1. Weather Hazards

1.1. Thunderstorms

Thunderstorms can be extremely deadly. Dangers caused by thunderstorms include closed roads, flooded streambeds, fast-moving streams often carrying debris, high winds, downed utility lines, power outages, lightning and hail damage.

Crew members should be aware of local weather patterns, avoid open areas during lightning storms, and leave the job site when prudent. Whether you are driving your personal vehicle, a government vehicle, or hiking, you need to be aware of heavy rains and flash floods. Pull over in a safe area if the rain becomes too severe, or seek shelter if you are hiking. Never go around blockades on the roads or attempt to cross a stream with high water moving through it.

1.2. Lightning

Lightning is one of the most capricious and unpredictable characteristics of a thunderstorm. Because of this, no one can guarantee an individual or group absolute protection from lightning. However, knowing and following proven lightning safety guidelines can greatly reduce the risk of injury or death.

Remember, YOU are ultimately responsible for your personal safety, and should take appropriate action when threatened by lightning. While no place is 100% safe from lightning, some places are much safer than others

The safest location during a thunderstorm is inside a large enclosed structure with plumbing and electrical wiring. If lightning strikes the building, the plumbing and wiring will conduct the electricity more efficiently than a human body. If no buildings are available, then an enclosed metal vehicle such as an automobile, van, or school bus makes a decent alternative. Not all types of buildings or vehicles are safe during thunderstorms. Buildings that have exposed openings are NOT SAFE, even if they are "grounded." These include metal sheds, picnic shelters/pavilions, carports, and baseball dugouts. Porches are dangerous as well. Other vehicles that are NOT SAFE during lightning storms are those which have open cabs, such as off-road vehicles, tractors and construction equipment.

Once inside a sturdy building, stay away from electrical appliances and plumbing fixtures. Stay in an interior room as an added safety measure. If you are inside a vehicle, roll the windows up, and avoid contact with any conducting paths leading to the outside of the vehicle (e.g. radios, CB's, ignition, etc.). Lightning can travel great distances through power lines, especially in rural areas. Do not use electrical appliances, ESPECIALLY corded telephones unless it is an emergency (cordless and cell phones are safe to use). Computers are also dangerous as they usually are connected to both phone and electrical cords.

Use the **Flash to Bang** method to estimate the distance of lightning from your location. When you see a flash of lightning, count the number of seconds until you hear the thunder. Divide the number of seconds by five to get the distance the lightning is away from you. For example, if you see lightning and then hear the thunder 10 seconds later, then the lightning is 2 miles away from you. The **30/30 Rule** states that people should seek shelter if the Flash-To-Bang delay (length of time in seconds between a lightning flash and its subsequent thunder) is 30 seconds or less. The second 30 corresponds to remaining under cover for 30 minutes after the final clap of thunder. A 30 second lead time is necessary prior to a storm's arrival because of the possibility of distant strikes. A 30 minute wait after the last thunder is heard is necessary because the trailing storm clouds still carry a lingering charge. This charge can and does occasionally produce lightning on the back edge of a storm, several minutes after the rain has ended.

Studies have shown most people struck by lightning are struck before and after the storm has peaked, not at the apex of a storm, illustrating that many people are unaware of how far lightning can strike from its parent thunderstorm. DO NOT wait for the rain to start before seeking shelter, and do not leave shelter just because the rain has ended.

1.2.1 Things to avoid include:

- Avoid water – evacuate streams or other water bodies; do not run water when there is a thunderstorm because water pipes carry electricity
- Avoid high ground
- Avoid open spaces
- Avoid metal objects such as electrical wires, fences, machinery, power tools, and motors
- Avoid telephones – do not use landline phones unless it is absolutely an emergency; do not use headsets or ear phones
- Avoid appliances – unplug and stay away from items such as refrigerators and computers.

1.2.2 If you are outside:

- Seek shelter in a truck, car, or van. If this is not an option, crouch down with your feet together and cover your ears to protect them from the thunder.
- Stay 15 feet away from other people to avoid transfer of shock.
- Stay away from trees, picnic shelters or rain shelters, and canopies.
- Avoid hill tops, open spaces, wire fences, metal wires, exposed tool sheds, and elevated objects. Avoid being the highest object in the area or being near the highest object in the area. Keep away from isolated high trees.
- Seek dry caves, canyons, or ditches, or hide beneath a head-high clump of trees in an open area in the forest.
- Crouch in a sitting position preferably on a mat or sleeping pad.

1.2.3 If someone is struck by lightning:

- You are experiencing an electrical charge if your hair stands on end or your skin tingles.
- Lightning may be about to hit you so drop to the ground at once.
- Victims struck by lightning receive a severe electrical shock and maybe burns, but they carry no electrical charge and can be moved safely.
- A person struck by lightning can often be revived by prompt administration of CPR and oxygen. Upon CPR administration, a person struck by lightning may maintain or regain a pulse, but still be unable to breathe on his/her own. Realize that rescue breaths may need to be administered for an extended time (even when chest compressions are no longer necessary).
- In a group hit by lightning, those appearing to be dead (no vital signs) should be treated first because there is a chance they can be revived.

1.3. General Weather Precautions

Supervisors shall tailor the work schedule to fit the climate, the physical condition of employees, and mission requirements. Acclimatization is necessary regardless of an employee's physical condition. The better one's physical condition, the quicker the acclimatization.

- Obtain weather forecasts and prepare for current and expected conditions.
- Evaluate work plans for safety and consider alternative travel routes or work schedules.
- Layer appropriate clothing when the weather is wet and/or cold and pack extra clothing when needed.
- Supervisors shall ensure employees understand the signs and symptoms of hypothermia, heat exhaustion, heat cramps and heat stroke.

- Heat stroke is a true medical emergency requiring an immediate emergency response. Employees working in hot environments shall be trained to recognize the early symptoms of heat stress and treat themselves and coworkers.
- Maintain adequate water intake by drinking water periodically in small amounts throughout the day.
- Co-workers may provide half-strength electrolytic beverages (e.g., Gatorade) or water to any team member with heat cramps.
- Seek shade while hiking and during breaks whenever possible.
- Maintain adequate water intake by drinking water periodically in small amounts throughout the day.
- Be aware of the warning signs indicating an approaching thunderstorm or lightning, including sudden reversal of wind direction, a noticeable rise in wind speed, and a sharp drop in temperature.
- Seek shelter if you hear thunder and see lightning within 30 seconds of one another. Do not stay on ridge tops, in open areas, near ledges and rock outcrops, or group together. Motor vehicles and buildings provide good shelter from lightning. If a building or vehicle is not available, seek ground lower in elevation than the surrounding area, such as a ditch, and lay flat.

2. Fire

2.1. Prevention

- Keep camp fires away from possible fuels. Do not start a fire under a tree. High flames might set it alight. Keep your camp fires small and controlled. Big fires are exciting, but please be responsible!
- Check, check, and re-check that all fires you create are out when you leave. Use water to take care of smoldering remains or cover them with sufficient sand or dirt to keep them from reigniting.
- If you need to smoke, then extinguish your cigarette butts and take them with you. Throwing a cigarette butt on the ground is an absolute no-no.
- Take notice of hand lenses and other equipment that has strong lenses. A lens in combination with sunlight can cause a fire. Use lens covers or keep any equipment with lenses packed.
- Avoid parking vehicles over dry vegetation. A hot engine could ignite the vegetation causing a fire. If you must park over vegetation, wait until the engine has cooled and check for fire. If possible, remove dead or dry vegetation from the area under the vehicle engine prior to leaving the vehicle unattended.

2.2. Fire Survival Tips

- Play it safe, do not enter or stay in areas with known fire activity or those with obvious wildfire smoke. If in doubt, call your supervisor for advice.
- Fires generally travel faster in the direction of the wind. In addition, fires travel faster uphill than downhill so take this information into account when avoiding a fire on foot or in a vehicle.
- If you are trapped in an area by fire, try to find a natural fire break such as a river or a large empty clearing for shelter.
- Should you be forced to try to break through the fire, cover your face and mouth with a wet cloth (or dry if no water is available) and run as fast as possible through the flames. Should your clothes catch fire, extinguish them by rolling and patting.
- Once you are safe, notify the proper authorities and NEPE office staff even if you think someone else might have already called in the fire.

3. Hazardous Plants and Animals

3.1. Plants

Even if you are knowledgeable in plant identification, it is unwise to eat edible wild plants, mushrooms, or other fungi while on the job to reduce the risk of intestinal distress or worse. It is also illegal to damage park resources, which includes picking plants.

Watch where you place your hands and feet and where you sit, as some plants such as prickly pear cacti have thorns and others such as stinging nettle or poison ivy can cause skin rash and irritation. It is always best to be aware of your surroundings. Watch for thorns and where you grab. Wear leather gloves, and carry a comb or pocket tool to remove cacti thorns.

- Employees are required to wear long-sleeved shirts, long pants, and high boots to prevent skin contact with plants (see footwear and clothing requirements). Wearing chaps or gaiters while hiking is a good idea.
- If stabbed by a sharp plant, wash well with soap and apply antiseptic cream. Bandage. Observe wound regularly to look for signs of infection.

3.2. Bees, Wasps, Hornets, Yellow-jackets

When you are outdoors in a rural area, park, or wilderness reserve, be aware of your surroundings and keep an eye out for bees, wasps, hornets and yellow-jackets to prevent being stung. Prevention includes the following:

- Be aware of areas prone to bees or hornets and what nest sites look like and avoid these areas as much as possible.
- Avoid wearing bright colors or wearing scents of any kind.
- Inform your supervisor and co-workers of identified nest locations and flag these locations if work is ongoing in the area.
- If stung, oral antihistamines (e.g. Benadryl[®]) can be taken if needed to reduce swelling.
- Employees who have a history of allergic reactions to insect stings should carry epinephrine in an appropriate emergency epi-kit delivery device prescribed by a physician (e.g. epi-pen). Such employees should inform their supervisor and co-workers, and indicate where they carry the kit and if they need any assistance. Supervisors should designate at least one crewmember to provide medical assistance to these persons, if needed, and provide appropriate training. If epinephrine is administered to prevent anaphylaxis, the employee requires evacuation. Contact your designated contact immediately to notify of the situation.

Allergic reactions may be life-threatening. Do not delay seeking professional medical assistance.

Anaphylaxis, a severe allergic reaction, can be recognized by one or more of the following symptoms:

- Shortness of breath
- Breathing difficulty
- Swelling of the tongue
- Vomiting
- Muscle weakness

3.3. Snakes

The western rattlesnake (*Crotalus viridis*) is found in the Greater Yellowstone Network in drier areas of sagebrush and ponderosa pine at lower elevations. Rattlesnakes normally respond to disturbance by either:

- Remaining motionless to avoid detection.
- Moving away and seeking cover.
- Assuming a defensive posture with their body coiled in a striking position while emitting a buzzing sound from their rattles.
- If you back away from a rattlesnake that is in a defensive posture, the snake will almost always retreat and seek cover. Rattlesnakes are capable of striking an object about half their body length away or less, but will seldom strike unless provoked by a continued close-proximity threat. Many defensive strikes are dry bites with no venom injected. The venom is dangerous, but seldom results in death.

Do not attempt to capture or handle a rattlesnake. Most cases of snakebite are the result of these attempts!

In rattlesnake habitat:

- Be aware of your surroundings. Watch out for rattlesnakes under rocks and in shaded areas when it is hot, and in sunny areas when temperatures are cooler.
- Use a hiking stick to probe brush you will be walking through.
- Never sit or climb or step over obstacles without first looking for hazards. Be particularly careful when turning over rocks or logs, or when moving through low brush.
- Be aware of foot placement when traveling down steep slopes and crossing over logs and rocks.

In the rare event that you or a crew member is bitten by a rattlesnake:

- Wash the bite area with soap and water and dress the wound.
- Try to keep the affected area of the body as still as possible. Use a splint if possible or useful.
- Keep area bite area lower than the heart.
- Mark the swelling so you can track rate of swelling.
- Seek immediate medical attention.
- Do **NOT** use ice to cool the bite, do **NOT** cut open the wound and try to suck out the venom, or use a tourniquet. Be aware that making an incision carries an inherent risk of complications.

3.4. Ticks

Be aware of ticks when working in areas with dense vegetation and high populations of large game mammals. Ticks hop onto your body as you brush against vegetation and burrow their heads into your skin. Deer ticks (smaller black and reddish-brown) are known to be carriers of Lyme disease and Rocky Mountain spotted fever, among other infectious bacteria. Use insect repellent, wear light colored clothing, and inspect your body for ticks when you are traveling through known tick habitat. It takes about 12 to 24 hours for the spirochete that causes Lyme disease to be transmitted from the tick once it burrows into the skin. So, quick identification and removal of ticks is important.

There are many methods of removing ticks; one is by using tweezers:

- Grab the tick as close to the skin as possible and slowly pull it out.
- Do not pull or squeeze too hard—you do not want the head to rip out or fluids from the tick to leak into the wound.
- Make sure to clean and sterilize the wound as well as your hands.

Lyme Disease is a serious condition—the symptoms can occur a few days to a week after exposure and include headache, stiff neck, fever, muscle ache, flu-like symptoms, general malaise, and in many cases a rash or lesion. Medical attention should be sought if you notice signs of Lyme disease.

3.5. Black Widow Spiders

Black widow spiders (*Latrodectus hesperus*) are potentially dangerous arachnids. About ½-inch long, they are shiny and black with a red hourglass marking on the abdomen of the female only (males are harmless). The black widow spider can be found in dark corners of sheds and out buildings, under logs and brush, in rock piles, in dark garages, in basements, in stables and in abandoned rodent holes. The black widow spider will bite if provoked. Always be wary of these when upturning rocks or logs, and watch where you place your hands. Wear leather gloves while you are working.

The bite contains neurotoxin venom that affects the central nervous system. The bite can be very dangerous to people of all ages, but they are rarely fatal. Pain spreads throughout the body accompanied by headache, dizziness, respiratory paralysis, nausea, and painful stomach cramps.

- Clean the site well with soap and water and apply a cool compress
- Keep the affected limb elevated to about heart level
- Aspirin or Tylenol may be used to relieve minor symptoms
- If symptoms are intense, medical attention is recommended.

3.6. Cougars or Mountain Lions

Mountain lions can be found in the Greater Yellowstone Network parks, although it is unlikely that you will ever see one. They are solitary and elusive, and their nature is to avoid humans. When a mountain lion makes a kill, it typically will feed on the carcass over a period of days. Avoid any animal carcasses you may encounter.

3.6.1. Avoidance Precautions

- Be alert of surroundings, frequently check behind you, make noise, and look up occasionally from any ground searches.
- Look for tracks, scratch piles, partially covered scat, and animal carcasses in trees and on the ground. Retreat away from any carcasses.

3.6.2. Encounter Actions

- Stop, stand tall, and don't run. Running may trigger an attack.
- Face the cougar, talk to it firmly, slowly back away, leaving the animal an escape route. Do not approach. Do not take your eyes off the animal and do not turn your back to it.
- Do not crouch down or try to hide.
- Try to appear larger than the cougar by getting above it. Stand on a stump or rock to look larger.
- Hold open your jacket to further increase your apparent size.
- If the animal crouches with ears back, bares its teeth, hisses, twitches its tail, or pumps its hind feet in preparation to leap, do the following:
 - Be more assertive.
 - Shout, wave your arms and throw rocks.
 - The idea is to convince the cougar you are not prey, but a potential danger.

If the cougar attacks:

- Fight back aggressively using any weapon on hand or your bare hands, and try to stay on your feet.
- If you are aggressive enough, a cougar will likely flee realizing it has made a mistake and might suffer injury.

4. Hostile People

Employees need to be aware of potential criminal activity in campgrounds and remote areas of public lands including illegal dumping, clandestine drug labs, marijuana cultivation, etc., and be prepared to

leave the area immediately. Persons engaged in such criminal activity can be hostile and violent if discovered. If you meet a member of the public who is hostile, be polite and non-threatening, leave the area as soon as possible and report the incident to your supervisor and law enforcement authorities, if appropriate. Crew members should always be in pairs to avoid dealing with a situation alone.

The vast majority of public land users is courteous and friendly and wants to use public lands properly and legally. Contact with these people will be friendly and educational to both parties. However, there are exceptions to this rule and employees should cultivate a situational awareness when they are out in the field. If an employee feels at all uneasy or uncertain about a situation in the field, he or she should not be embarrassed to leave the area. The job can always be completed with help at a later time. Personal health and safety are always primary considerations on the job.

5. Zoonotic Diseases

5.1. Hantavirus

Hantavirus Pulmonary Syndrome (HPS) is a rare but potentially deadly disease caused by inhalation of aerosolized infected rodent saliva or droppings, or possibly by ingestion of contaminated food or water or direct contact with broken skin. Persons have been infected from being bitten by rodents.

Symptoms may rapidly progress to severe pulmonary crisis within 2 days or the virus may incubate for a month. Early symptoms include fatigue, fever and muscle aches, especially in the large muscle groups—thighs, hips, back, and sometimes shoulders. These symptoms are universal. There may also be headaches, dizziness, chills, and abdominal problems, such as nausea, vomiting, diarrhea, and abdominal pain. About half of all HPS patients experience these symptoms. Four to 10 days after the initial phase of illness, the late symptoms of HPS appear. These include coughing and shortness of breath, with the sensation of, as one survivor put it, a "...tight band around my chest and a pillow over my face" as the lungs fill with fluid.

Though NEPE does not currently conduct rodent monitoring, nor do we maintain any physical structures, we do work in or around these structures in our parks. There are many simple ways to prevent infection. Avoid contact with rodents, burrows, and dens. Adequately air (at least 30 minutes) backcountry structures before entering. Keep food in rodent-proof storage. Sterilize water by boiling or filtering. If cleaning, mop, rather than sweep to avoid spreading dust. Spray droppings with a 50% bleach solution before wet mopping; wear a respiratory mask while cleaning infected areas. Other household disinfectants such as Lysol and 409 have also proven effective.

If you have a concern about potential exposure to hantavirus in your work environment, contact your supervisor. Obtain additional information on hantavirus from the Centers for Disease Control and Prevention (<http://www.cdc.gov/ncidod/diseases/hanta/hps/>).

5.2. Rabies

There have been several rabies outbreaks in recent years that tended to travel through different species (raccoons, skunks, foxes, etc.). An animal that has been bitten by another rabid animal cannot spread the rabies virus until it has reached their brain. At that point, they are infectious but may not show symptoms right away. Studies have shown that a skunk can be infectious for 18 days before it dies, but it is not necessarily symptomatic the whole 18-day period. Signs of a rabid animal include abnormal behavior (nocturnal animals out during the day, unafraid of humans, don't disperse with loud noises, etc.) and salivating. Skunks cannot transmit rabies through their spray. Dead animals can transmit rabies if they are not putrid or withered up (i.e., if another animal eats a fresh dead rabid animal or kills a rabid animal). All wild animal bites should be reported.

Appendix D—Rights and Responsibilities for Employees and Supervisors

It is not possible to remove all unsafe conditions from the field environment; however, crew safety is our first priority in the field. Both employers and employees are responsible for safety. This document serves as notice to employees of their rights and responsibilities related to the safety program implemented by Nez Perce National Historical Park (NEPE). It is designed to accompany the job hazard analyses developed for park work conducted by the resource management division of the park.

Supervisor Responsibilities:

- Provide safety training for all employees
- Provide proper safety equipment
- Provide personal protective equipment
- Report and investigate all accidents and incidents

Employee Responsibilities:

- Report unsafe working conditions
- Comply with safety and other work regulations
- Use safety equipment and personal protective devices
- Report all accidents and incidents
- Request personal protective equipment

Employee Rights:

- Employees have the right to decline a task if they believe that their safety is at risk.
- Employees have the right to be paid for participating in safety training, reporting accidents, or other safety-related activities.
- Employees have the right to report safety concerns to the Occupational Safety and Health Administration or other regulatory group.
- Employees have the right to remain anonymous when reporting a safety concern.
- Employees have the right to report safety concerns without fear of reprisal, coercion, or discrimination.

Approved by:

Integrated Resource Manager

Signature	Title	Date
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We, the undersigned work leader and crew members, acknowledge and understand our rights and responsibilities related to personal safety as outlined above.

Signature	Date	Signature	Date
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Work Leader			

Appendix E— Equipment lists (for field and overnight trips)

√	Safety equipment for vehicle
	Complete change of clothes (stored in dry area)
	Fire extinguisher (safely secured)
	Tool kit
	OSHA approved American National Safety Institute – Class 2 high visibility reflective vest (2) (specification: 775 sq. in visible fluorescent background and 201 sq in visible reflective material no less than 35 mm wide)
	Bungee cords (to secure loose articles)
	Flagging (orange)
	Flares or emergency flashers
	Flashlight (including fresh batteries)
	Fire shovel (summer)
	Snow shovel (winter)
	Ice scraper (winter)
	Jumper cables
	Tire gauge and spare oil

√	Emergency safety kit (one per person when spending night in field): The 10 Essentials
	Map & compass
	Whistle
	Some type of shelter, e.g. tarp, space blanket or bivy sack
	Extra food
	Extra water
	Extra layers of warm and rainproof clothing
	Headlamp or flashlight
	Fire starting material
	Knife
	Sunblock and sunglasses
	First aid kit
	Flagging

√	Communications and First Aid
	Vehicle safety binder (including maps, emergency contact form)
	Cellular phone (check that the service is operational for the area to be traveled)
	Radio (check that the service is operational for the area to be traveled)
	First aid kit and manual (check for missing or old, expired items and replace if necessary)

√	Weather and UV protection
	Boots / Proper footwear
	Fluids (for example, water and sports drinks)
	Hat, wide-brimmed
	Insect repellent (unscented)
	Rain gear
	Sunglasses
	Sunscreen
	Warm clothing

√	Personal First Aid Kit	
	1	Tweezers
	1	CPR Microshield
	4	Non-Latex Exam Gloves
	1	5"x9" Trauma dressing
	2	4"x4" Gauze Pads
	1	Roll Cloth Tape
	1	Triangular Bandage
	1	12ml Irrigation Syringe
	1	Pack Wound Closure Strips
	1	Telfa Non-Adherent dressings
	1	4" Elastic Bandage
	1	3" Gauze Rolls
	5	1"x3" Elastic Strips
	5	3/4"x3" Elastic Strips
	3	Fingertip Bandages
	3	Knuckle Bandages
	1	Moleskin Pads
	1	Packages 2nd Skin
	1	Transparent Semi-Permeable Dressing
	2	Tincture of Benzoin Swabs
	2	Alcohol Prep Pads
	2	Betadine Swabs
	3	Triple Antibiotic Ointments
	3	Ibuprofen Packets
	3	Non-Asprin Packets
	3	Diphen Packets (Benedryll)
	3	Antacid Packets

Appendix F— UTV/ATV Quicklist

A. Supervisors shall ensure that operators possess the skills required for the work project or activity. Recommend that the supervisor consider the following issues:

1. Is the ATV/UTV the appropriate vehicle for the work project or activity
2. Operator tasks
3. Personal protective equipment (over the ankle boots, gloves, helmet, and eye protection are minimum requirements)
4. Operator experience/training level
5. Vehicle cargo rack weight limitations
6. ATV/UTV capabilities/limitations
7. Loading, unloading, and transportation of the vehicle
8. Terrain (e.g., need for ROPS)
9. Weather and work environment
10. Maintaining reliable communications
11. Check-Out/Check-In (COCI) procedures
12. Evacuation Plan which includes: location of work, nearest medical evacuation site latitude/longitude, and routes to the work-site for responding ground SAR (Search and Rescue)/EMS (Emergency Medical Service).

B. Prior to operating any ATV/UTV, tailgate safety meetings shall be held and documented specifically identifying their local hazards as identified within the JHA.

Before riding, always perform a pre-maintenance check such as T-CLOC (ASI Program) or similar check. The ATV/UTV pre-ride inspection shall be documented on

Appendix B, Pre-ride Inspection Checklist. T-CLOC maintenance check includes:

1. T – Tires, Wheels
2. C – Controls, Clutch, Brake, Throttle
3. L – Lights

4. O – Oil, Fuel, Air Filter

5. C – Chassis, Suspension, Nuts, Bolts

C. An annual maintenance inspection from the manufacturer, certified ATV/UTV mechanic, or Fleet Manager's designee is required. A copy of the inspection report will be maintained in the equipment history folder.

D. Do not carry passengers on ATVs.

E. Carry only manufacturer recommended number of passengers on UTVs. All passengers must have their own seat belts.

F. When parking the ATV/UTV:

1. Engage brake;
2. Shift transmission into low range/low gear;
3. Block tires when parking on an incline/decline; and
4. Turn off and remove keys if appropriate.

G. When carrying equipment, equalize the load to maintain balance, stability and center of gravity. Never exceed the manufacturer's maximum carrying capacity of either axle or cargo rack as specified in the ATV/UTV's owner's manual. Follow manufacturer loading instructions.

H. When using an ATV/UTV to tow a trailer and/or equipment the maximum manufacturer's towing capacity specified in the vehicle owner's manual shall not be exceeded. [Note: Manufacturers specified towing capacity varies depending on grade or slope of the terrain to be travel.] In addition, the trailer's weight rating shall not be exceeded.

I. Always secure equipment as close to the rider as possible to maintain center of gravity. Additional precautions must be observed when carrying liquids. All tools or equipment transported on ATV/UTVs shall be secured.

J. Do not drive recklessly or engage in horseplay.

K. Do not enter deep or swift moving water. Hazards exist when:

1. Stream bottom is unstable due to mud, sand, boulders, or submerged obstacles.
2. Water depth is not consistent through the entire route of travel.

3. Stream width prevents a complete view of the bottom across the route of travel.
4. Water depth and current may stall the engine.
5. Current is forceful enough to require you to counteract it to maintain balance or direction of travel.

L. Modifications that include changes to the frame, electrical systems, and other changes to the manufacturer's design of the ATV/UTV's mechanical configuration are not allowed.

1. Installation of "off the shelf" "add-ons", such as carry-all boxes, equipment bags, approved extended range fuel tanks, equipment racks or other attachments such as agriculture spraying equipment are allowed.

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

NPS 429/120568, May 2013

National Park Service
U.S. Department of the Interior



Natural Resource Stewardship and Science

1201 Oakridge Drive, Suite 150
Fort Collins, CO 80525

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