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| **Field Site Location:** | Descriptive name of research location (e.g. Yosemite Field Station, CA; Tuolumne Meadows, Yosemite) | | |
| **Activity Description:** | Type, length, and purpose of activity (e.g. hiking 3-4 miles, collecting specimens, etc.) | | |
| **Plan Created for:** | Name of Research Group / Course / Trip Leader | **Date of revision:** | Mo-Day-Yr |
| **Date(s) of Travel:** | Start date, duration, expected return to campus | | |

A field safety plan serves as a tool to document your hazard assessment, communication plan, emergency procedures, and training. This plan should identify hazards, as well as precautions and actions taken to address and mitigate those hazards. Instructions:

1. Complete this field safety plan: insert specifics for your site and operations, delete irrelevant sections.
2. Complete appropriate training for your site and operations (e.g. first aid, heat illness, task-specific training).
3. Obtain immunizations, prophylaxis and Medical Evaluation for your destination, if applicable (schedule 8 weeks in advance). See immunizations/medical evaluations below. Travel resource [CDC Yellow book](https://wwwnc.cdc.gov/travel/)
4. Hold a pre-trip meeting with your group and/or supervisor to review your field safety plan, travel logistics, pack list (including first aid kit), personal safety and security concerns, and any remaining training needs.
5. For UC trips, register trips more than 100 miles from campus via [UC Away](https://ehs.ucop.edu/away/) for travel insurance documentation, location-specific travel alerts via email, and emergency/travel assistance contacts.

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| **Site Information** | | |
| **Location:** | Latitude: **XX.XX (from GPS/Map)** | Longitude: **XX.XX (from GPS/Map)** |
| **Site Information:** | *Elevation, terrain, environment.* | |
| **Travel to Site:** | *How will participants get to the field site? Note any dangerous roads, conditions.* | |
| **Site Access:** | *Are there any particular restrictions or challenges to accessing site? Note any alternate routes or suggested parking areas; gate access codes, etc.* *Make special note if isolated or remote.* | |
| **Environmental Hazards:** | *Describe any dangerous wildlife, insects, endemic diseases, poisonous plants, etc. that participants may encounter. Note intended mitigation measures; discuss prior to trip. See Common Hazards list below.* | |
| **Security:** | *High risk for harassment or violence? Note intended mitigation measures; discuss prior to trip.* | |
| **Evacuation Plan** | *Plan for if there is a natural disaster such as wildfire that causes evacuation of the field site and/or field station. Where will your group rendezvous? Where will your group be housed while evacuated? Set up a communication plan with your home institution. Communicate the necessity of having a go-bag to all participants.* | |

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| **Site Information** | |
| **No Go Criteria:** | *What are the conditions under which approach to - or activities at - the site should be stopped or canceled? e.g. heavy rains, electrical storms, snow, temperatures > 100 degrees, etc. See Green Amber Red framework below* |
| **Expected Weather:** | *Note extreme conditions that could impact the trip or require additional planning, (e.g. high heat, wind, rain, snow, approaching storm).* |
| **Drinking Water Availability:** | Plumbed water available  Water cooler with ice provided  Bottled water provided  Natural source and treatment methods (e.g. filtration, boiling, chemical disinfection): |
| **Access to Shade/Shelter:** | *If forecast exceeds 80°, shade must be provided by natural or artificial means for rest breaks.*  Building structures ­  Trees ­  Temporary Canopy/Tarp  Vehicle with A/C  Other: |
| **High Heat Procedures:** | *Required when temperatures are expected to exceed 95° F: If possible, limit strenuous tasks to morning or late afternoon hours. Rest breaks in shade must be provided at least 10 minutes every 2 hours (or more if needed). Effective means of communication, observation and monitoring for signs of heat illness are required at all times. Pre-work safety discussion required.*  Direct supervision  Buddy system  Reliable cell or radio contact  Other: |

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| **Emergency Services and Contact Information** | | | |
| **Local Contact:** | *Breezy Jackson,*  *Yosemite and Sequoia Field Stations Director*  *7799 Chilnualna Falls Road*  *(209) 628-5758*  *Marlon Spinneberg*  *Yosemite and Sequoia Field Stations Steward*  *(209) 626-6895*  *YOSE Dispatch (209) 379-1992*  *SEKI Dispatch (559) 565-3195* | **Home Institution Contact:**  *Not on trip. Provide a copy of this plan.* | *Name, number, email; may be a Professor/PI, department contact, supervisor back on campus, etc.*  **Frequency of check ins:** *daily, at end of work day, etc.* |

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| **Emergency Services and Contact Information** | | | |
| **Emergency Medical Services (EMS):** | *Dial 911. Procedures for contacting emergency medical services if no cell coverage.* | | |
| **Emergency Notification System** | *Sign up for* [*Nixel*](https://nixle.com/city/ca/wawona/municipal/) *and* [*Everbridge*](https://member.everbridge.net/index/453003085619123/#/signup) *alerts.* | | |
| **Nearest Emergency Department (ED):** | *Evacuation plan and transportation options to the nearest Emergency Department; include estimated transport time, contact information and driving directions from the site to the nearest provider of emergency medical care. Attach map with specific directions.*  Yosemite Medical Clinic 9000 Ahwahnee Drive, Yosemite Valley, CA 95389 +1 209 372 4637 Open 9am to 5pm M-F  John C. Fremont Healthcare District 5189 Hospital Rd Mariposa, CA 95338 +1 209 966 3631  Oakhurst Urgent Care 48629 Victoria Ct, Oakhurst, CA 93644 | | |
| **Cell Phone Coverage:** | **Primary Number:**  **Coverage:** Verizon is good near Wawona. Verizon and AT&T is spotty throughout Yosemite. There is no cell coverage at Sequoia Field Stations. There is spotty Verizon coverage at Lodgepole. | **Satellite phone/device:**  yes no  **Type/number:** | **VHF Radio**  yes no  **Frequencies:** |
| **Nearby Facilities:** | *What facilities are available at or near the site: restrooms, water, gas, public phone, store? If not, where are the nearest services along the route?* | | |
| **Side Trips:** | *Are side trips planned or allowed during free time? Before or after the planned activities? Are there restrictions, specific rules, or expected code of conduct?* | | |

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| **Equipment and Activities – Consult with EH&S for specific training and requirements.** | |
| **Research Activities:** | *Briefly describe the goal of your field operations, e.g. collection of samples, observation of animals/environment, interviews with human subjects, etc.…* |
| **Field Transportation:** | *What vehicles will be used during field operations?* |
| **Research Tools:** | *Briefly describe tools or equipment that will be used to access the research site or during research activities. Indicate specific training required before use, e.g. sharps (knives, razors, needles), hand tools, chainsaws, power tools, heavy machinery, tractors, specialty equipment, firearms; lasers, portable welding/soldering devices; other hazardous equipment or tools.* |
| **Other Research Hazards:** | *Describe other potential research-associated hazards e.g. handling or shipping hazardous materials (chemical, biological, radiation, and explosives), handling animals, climbing or working at heights, rigging; shoring/trenching, digging/entering excavations, caves, other confined spaces.)* |
| **Personal Protective Equipment:** | *Required—e.g., boots, safety glasses, PFDs, hardhats, etc.*  *Recommended – e.g., walking sticks, gloves, long pants, hats, insect repellant, sunscreen* |
| **Trainings:** | *Required or recommended trainings needed for leaders and participants (e.g., CPR/AED, epinephrine autoinjector, wilderness first aid, wilderness first responder, etc.)* |

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| **Additional Considerations** | |
| **Personal Safety & Security:** | *Personal safety risks during free time should be considered and discussed in advance, e.g., alcohol or drug use, leaving the group, situational awareness, harassment, or local crime/security concerns. Review expectations and set the tone for a safe, successful trip.* |

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| **Campus Contacts** | |
| **UCPD:** | 209-228-8273, police.ucmerced.edu |
| **Occupational Health Facility / Arthur Ashe:** | health.ucmerced.edu  Faculty/Staff: individual health care provider OR  Students: H. Rajender Reddy Health Center 209-228-2273 |
| **EH&S:** | 209-228-3347, ehs.ucmerced.edu |
| **UC Travel Emergency Assistance:** | 209-228-4705 Campus Risk Services  800-527-0218 United Healthcare/UC Travel Insurance  410-453-6330 Outside the U.S. or via email assistance@uhcglobal.com. . |
| **Report Injuries:** | Call Risk Services 209-228-4705 and use the Employer’s Report of Injury.  For non-paid students, use the same form. |

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| **Green, Amber, Red Risk Assessment Framework**  **Instructions:** Each team member assigns a score from 1-10 for each of the eight elements. The risk score is zero (no risk) to ten (high risk). Several team members should individually complete their score. Individual scores are summarized into a Total Risk Score. The ability to assign numerical scores or colors is not the key ingredient in how this process serves to perform effective risk assessment. The key ingredient occurs when team members discuss their post-scoring results together, because this generates valuable discussion toward understanding the risks and what actions the team should take to mitigate them. We have offered a checklist to guide your score, but this is not exhaustive. | | |
| **Category:** | **Checklist:** | **Score:**  **0-10, 0 is least risk.** |
| **LEADERSHIP** | * Leader(s) is/are familiar with the Yosemite/Sequoia-Kings Canyon area, Yosemite/Sequoia Field Station, and areas where activities are planned. * Leader(s) has/have taken bystander training or other inclusion training within the last year. * Leader(s) has/have current Wilderness First Responder or Wilderness First Aid training. * Leader(s) has/have current CPR/AED training. * Leader(s) has/have multiple years of experience leading groups in the field. * The leadership structure of the group is clear. * There is an appropriate ratio of students/participants to leaders. The appropriate ratio depends on the activity, but should generally be 8:1 or lower for field work. * Leadership members are ethnically and gender diverse and representative of the diversity of participants. |  |
| **PLANNING** | * Leaders have read the Welcome email thoroughly and communicated important information to all participants. * Leaders have prepared an evacuation plan in case of fire, flood, snowstorm, group illness, or other emergency. * Leaders have checked the weather forecast, air quality forecast, and current conditions of roads and trails. * Leaders have subscribed to [Nixel](https://nixle.com/city/ca/wawona/municipal/) and [Everbridge](https://member.everbridge.net/index/453003085619123/#/signup) alerts. * Leaders have pertinent medical information and emergency contact information for participants. * Leaders have a participant roster with cell phone numbers. * All participants have created a [Go-Bag](https://www.readyforwildfire.org/prepare-for-wildfire/get-set/emergency-supply-kit/) in case of emergencies. * All participants have participated in planning the event. |  |
| **CONTINGENCY RESOURCES** | * Leader(s) have registered their trip with their home institution. * Leaders have a list of local hospitals and emergency services. * Leaders have programmed Yosemite Dispatch and [Mountain Crisis Center Hotline](https://mountaincrisisservices.org/24-hr-hotline) into their phones. * Leaders have identified emergency housing in case Yosemite Field Station is evacuated. * Leaders have programmed Yosemite Field Station Director's and Steward's cell phone numbers into their phones. \*Note, we need to hear from you during an emergency, but we probably will not be available to help you. Have a contingency plan that does not depend on us. * There are sufficient vehicles and drivers to transport all group members and their belongings in case of evacuation. |  |
| **COMMUNICATION** | * Leaders have at least two forms of communication. Typical communication forms include cell phone, VHF radio, InReach, or satellite phone. At Yosemite Field Station, Verizon carrier cell phones work. There are landlines within the cabins. At Sequoia Field Station there is no cell service. The nearest service is at Lodgepole. There is a NPS VHF Radio inside the cabins for emergencies. * There is a plan for daily or twice daily check-ins between group members who are in the deep field (i.e., away from Yosemite Field Station). * There is a Code of Conduct for the group and everyone has read it and had an opportunity to give input. * Leaders have given participants the opportunity to provide feedback and ask questions ahead of the trip. * Participants know who to go to if they feel uncomfortable speaking with leadership. * Housing, code of conduct, and accessibility plans have been co-created with participants. |  |
| **TEAM COMPOSITION** | * Participants have had appropriate training for the environment (e.g., heat illness prevention, cold injuries prevention, etc.). * The planned activities are appropriate for the abilities and experience level of the group. * Participants have a sense of belonging in the field. * Participants' demographics are diverse and representative of the home institution population. * All participants and leaders have read: [You are welcome here: A practical guide to diversity, equity, and inclusion for undergraduates embarking on an ecological research experience](https://onlinelibrary.wiley.com/doi/10.1002/ece3.7321) |  |
| **TEAM FITNESS** | * All participants have relevant vaccinations. For Yosemite and Sequoia Field Station this includes current COVID-19 and Influenza vaccines. * Participants are well rested and physically and mentally prepared for the rigors of field work. * Team morale is high. * The trip is not planned for a particularly stressful time of the semester. * The academic, community, and global context is supportive of travel. |  |
| **ENVIRONMENT** | * The team has made a complete list of objective environmental hazards for Yosemite/Sequoia Field Station, our field sites, and travel between locations (see example below). * The weather and air quality will be supportive of field activities. * All participants will have adequate gear and clothing for coping with hot/cold/wet/dry conditions. * All participants will have adequate footwear for walking on uneven terrain. * Participants will have adequate food and water. * Roads will be open and passable. Vehicles are properly equipped with 4WD, snow tires, and chains as appropriate. * There will be sufficient daylight to complete activities. Participants have headlamps or flashlights. * Participants have received Hantavirus training. * Participants have received Leave No Trace training and are familiar with Yosemite food storage regulations. * Participants know to keep a respectful distance from wildlife including squirrels and deer. * Any additional specific environmental hazards have been addressed such as swift water, boating, high altitude, steep slopes, travel on snow, travelling off trail, working in burned areas, tree hazards, rattlesnakes, rabies, food-borne illness, entering caves or mines, chemical safety, and many more. \*Note: some of these activities may require specific training from your Environmental Health and Safety Office. |  |
| **ACTIVITY COMPLEXITY** | * The potential harmful outcomes to people or equipment are minor and/or can be easily mitigated. * The time exposed to hazards will be limited. * It is likely that learning/research outcomes will be achieved. * Multiple field research locations or long-duration field outings will be supported with adequate staffing, transition time, and time off. * Any staffing changes will be supported with adequate hand-off time. * There is a plan for navigating crowded driving, parking, and hiking conditions during the peak tourism season. * There are no ongoing or expected pressures on Yosemite emergency services resources such as natural disasters, crowding, Holiday weekend, epidemic resurgence, etc. |  |

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| **GAR Risk Assessment** | | |
| **Green** | **Amber** | **Red** |
| Score 1 – 35  Go for it!!  And reassess frequently. | Score 36 – 60  Caution  Mitigate hazards before proceeding. | Score 61 – 80  STOP!!  Do not proceed unless significant mitigation occurs. |

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| **Common Hazards Associated with Work in Yosemite and Sequoia-Kings Canyon National Parks** |
| ***\*Note: This list may not include all hazards associated with your work. Please add to this list.*** |
| **DRIVING**   * Comply with all California traffic regulations. * All vehicle occupants shall wear seat belts. * Ensure that drivers are well-rested. * Be aware, especially at night, of pedestrians, bicyclists, and other vehicles. There can be people almost anywhere along Yosemite’s roads and interns must drive with caution in populated areas. People can step out from between parked cars, people will stand in the middle of the road to take photos, people will walk along the road in areas with no road shoulder, and people will be waiting at crosswalks. People always have the right of way and drivers must yield to them. * Bicyclists always have the right of way on park roads. Do not pass a bicyclist on any section of the road that is curvy or where you cannot see at least 300 feet ahead of you. Pass bicyclists by giving them 5 feet of space and do not cut them off after passing. If you cannot pass a bicyclist immediately, use your hazard blinkers to inform other drivers of the delay. * High winds (25+mph) can cause dead or dying trees to fall over unexpectedly. On days with a forecast of high winds, evaluate whether it is safe to be driving at all. * Most park animals are active at dawn and dusk which corresponds to the same times that interns are commuting. Low speed limits throughout the park ensure that there are fewer accidents where wildlife are struck by vehicles. Always look for wildlife on the side of the road and slow or stop if wildlife is in the road. If an animal is on the road and a collision with it cannot be avoided, it is better to hit the animal rather than drive the vehicle off the road or have a head on collision with another vehicle. * Rockfall can occur at any time and can vary from pebble-sized to house-sized boulders. Obey all speed limits and keep an eye out on blind curves. If an active rockfall is occurring, even with pebble sized rocks, do not drive through the area because it could get more severe without warning. Stop, turn around and go back the other direction immediately. * When parking vehicle along roadside, make sure all four wheels are off pavement, and vehicle is in a maintained pullout. * Make concessions to other drivers who are unskilled or ignorant of the hazards they create. Drive defensively and yield right-of-way. * Never tailgate; a vehicle should be 30-40 feet behind the vehicle in front of them at all times. * Be aware of traffic situations developing far ahead of the vehicle. * Never drive faster than speed limit, road conditions, and traffic allow. * Down shift to slow vehicle on steep downhill grades. Do not ride and overheat your brakes. * Slow down and increase following distance, do not perform sudden maneuvers. * If your vehicle begins to slide: ease off the gas and do not touch the brake, steer in the direction of the skid, when you feel the vehicle straighten out, turn the wheels straight and keep moving. |
| **WORKING ALONG ROADS**   * Wear Safety vests when working along a road. * Be aware of traffic when near or crossing roads. |
| **BACKCOUNTRY TRAVEL**   * Always watch your footing. Slow down and use extra caution around logs, rocks, and animal holes. * Watch out for wet and slippery limbs, logs and debris. Extremely steep slopes (>50%) can be hazardous under wet or dry conditions; consider an alternate route and/or bring trekking poles. * Wear laced boots with a minimum 8" high upper and non-skid Vibram-type soles for ankle support and traction. * Backcountry travel will take the team far from rescue support. In the winter, this hazard is enhanced due to incomplete helicopter coverage. * Always carry two forms of communication devices. * Make conservative choices. |
| **MOUNTAIN LION**   * To avoid mountain lion confrontation while working try to work in a group. If a lion is close by do not bend over, squat, or sit down. * Carry a noisemaker and something to throw at or strike a lion if needed. * Be alert to your surroundings and check behind you frequently. * Whenever possible avoid brushy, thickly wooded areas. * Let someone know your exact location and time you plan to return. * If you encounter a lion: If not being chased, turn immediately and face the animal. Do NOT lose eye contact. Remain standing. Do NOT run away or bend over. Face the animal and stand your ground. Raise your arms, look big. Talk loudly and firmly. Prepare to use the noisemaker or shout if necessary. If the lion starts to crouch or advance, make noise and throw whatever you can without losing eye contact or bending over. Wait for the lion to withdraw before moving. Although unusual, be alert for a second lion. * If you are attacked, protect your neck and throat and FIGHT BACK! |
| **BEARS**   * Always store food and trash in bear-safe containers. Never leave food or trash outside or in parked vehicles. Secure doors and windows of residences and vehicles. * Never approach any bear, regardless of its size. Be wary of cubs. If you see a bear at a distance, and it is unaware of your presence, remain quiet and alter your travel path to avoid the animal, remaining down-wind of it. * If you encounter a bear at close quarters, and it appears to be non-aggressive, face the bear and make yourself look big. Back away SLOWLY. * If the bear appears to be aggressive and comes toward you, make yourself look big, shout, and throw objects at it. Do not run from a bear. Drop a backpack or other non-food object that the bear may become interested in and stop its advance. If a black bear makes physical contact, defend yourself aggressively. |
| **POISON OAK**   * Learn to recognize the plant in its different growth forms, and at different stages of the growing season. * Wear long-sleeved shirts, pants and gloves as appropriate. * If you know you are going to be exposed to poison oak, use a barrier cream and wash affected areas soon after exposure. * Wash exposed clothing and footwear separate from other clothing. * Try to remove any clothing with oil on it before sitting in vehicles to avoid spread. |
| **RATTLESNAKE**   * To avoid snakebite wear appropriate footwear such as boots with an 8" high upper and lug soles. Wear snake chaps. Step onto rocks and logs rather than over them, use caution in riparian zones. Don't place your hands on unseen ledges or into animal holes. Don't use bare hands to turn over rocks or boards. Do not try to catch, kill or molest venomous snakes. Learn to recognize the different species of snakes in the Sierra Nevada. Be alert to where you are walking. * To treat snakebite remain calm and inactive. Contact NPS dispatch on the radio and give them details of the bite and your location. If you are far from a road, arrange for a helicopter pick up. If a co-worker is close by or within radio contact, have them assist you. Make note of the time that venom injection occurred. If possible, keep the affected limb lower than your heart. Do NOT make incisions over the bite. Do NOT constrict the flow of blood. Do NOT immerse the affected limb in ice water. Get to a hospital as soon as possible. |
| **TICKS**   * Wear light colored clothing that fits tightly at the wrists, ankles, and waist. Each outer garment should overlap the one above it. Cover trouser legs with high socks or boots. Tuck in shirt tails. * Search the body on a regular basis, especially hair and clothing; ticks generally do not attach for the first couple of hours. * If a tick becomes attached, remove it by grasping as close as possible to the point of attachment and pull straight out with gentle pressure. Wash skin with soap and water then cleanse with rubbing alcohol. Place the tick in an empty container for later identification, if the victim should have a reaction. Record dates of exposure and removal. Do not try to remove the tick by burning with a match or covering it with chemical agents. If you cannot remove the tick, or the head detaches, seek prompt medical help. * Watch for warning signs of illness: a large red spot on the bite area, fever, chills, headache, joint and muscle ache, significant fatigue, and facial paralysis are reactions that may appear within two weeks of the bite. Signs and symptoms specific to Lyme disease include: a bull’s eye shaped rash, confusion, short-term memory loss, and disorientation. |
| **BEES, WASPS, ANTS**   * If you or anyone you are working with is known to have allergic reactions to bee stings, tell the rest of the crew and your   supervisor. Make sure you carry emergency medication with you at all times and that it is not expired. Assist the affected person with injection of epinephrine and/or inhalation of albuterol if they have it with them and it is prescribed to them. If the victim is conscious and not in respiratory distress, give antihistamine medication (e.g., Benadryl, chlo-amine tabs). Provide CPR if appropriate.   * Be alert to hives in trees, brush, on ground, or in hollow logs. Watch for insects travelling in and out of one location. Wear long sleeve shirts and trousers and tuck in shirt. Bright colors, perfumes, and metal objects may attract bees. * If stung, cold compresses may bring relief. If a stinger is left behind, scrape it off the skin. Do not use tweezers as this squeezes the venom sack, worsening the injury. If the victim develops hives, asthmatic breathing, tissue swelling, or a drop in blood pressure, seek medical help immediately. Assist with medication as described above. Provide CPR if appropriate. |
| **WORKING IN BURNED AREAS**   * Maintain situational awareness and utilize the risk management process. Look up, down and all around for hazard tree indicators and high risk tree species. Stay alert for environmental conditions that could increase hazard tree risks. These include strong/gusty winds, steep slopes and obscured visibility (such as smoke or limited daylight) that inhibits visibility of tree tops. * Consider wearing a hard hat. * Watch where you are placing your feet. Yell alerts to others when necessary. Keep your eyes on your path of travel. If your attention is diverted, stop and complete the task before proceeding. Excessive amounts of white ash may indicate the presence of a stump or root hole. Size up your surroundings. * Be extra careful in areas of wet ash, loose rocks and unstable slopes. Particularly watch out for short stobs created by burned vegetation. On steep grades do not walk directly below other personnel and keep a safe distance from others. * Stay alert and actively search surrounding area for snags. Approach all snags with caution. Avoid spending all of your time looking down, not noticing hazards in the air. If the wind is blowing (trees swaying) in a recently burned area, move to an unburned or treeless area as quickly as possible. |
| **SWIFT WATER**   * Water hazards in Yosemite cause more deaths each year than any other cause. Never swim or wade upstream from the brink of a waterfall, even if the water appears shallow and calm. * In summer, rivers and creeks swollen by runoff from snowmelt are dangerous. Powerful currents, icy water, and rocks and logs can trap or kill people. Rocks along the water's edge may be slippery when wet or dry. * If you cross a stream without a bridge, avoid deep or swift water and unbuckle your pack's waist strap so you can shed it if you fall in. * If crossing on a natural bridge of rocks or logs, plan where you will land if you fall. Never cross rivers above rapids or falls. * Never swim alone. |
| **HANTAVIRUS**   * Hantavirus Pulmonary Syndrome (HPS) is a rare but severe (and sometimes fatal) respiratory disease caused by exposure to hantavirus. Anyone who comes into contact with deer mice is at risk of HPS. Rodent infestation in the home increases exposure to hantavirus. * Clean up any easy-to-get food. Store food properly. * Report mouse droppings to YFS staff. Never clean up after rodents without using proper safety protocol including bleach, gloves and respiratory protection. |
| **PLAGUE**   * Plague is a rare but highly infectious bacterial disease. Humans and other animals can get plague from fleas that live on infected wild rodents (mice, squirrels, chipmunks, etc). Keep your distance from all wildlife and never touch wild animals (alive or dead). |
| **NOROVIRUS**   * Norovirus is a highly contagious virus causing gastroenteritis (inflammation of the stomach and intestines). This leads to diarrhea, vomiting, and stomach pain. Always wash your hands carefully with soap and water, especially after using the toilet, and before eating or preparing food. Report any symptoms to Education Office staff immediately. |
| **WATERBORNE ILLNESS**   * Treat all river or lake water before drinking. Use a water filter or boil water for at least three minutes to remove bacteria and protozoa. |
| **LIGHTNING**   * Though most common June through September, thunderstorms can happen any time of the year. Thunderstorms are most common in the afternoon. * Seek shelter or go to lower elevations if you see towering thunderheads, darkening skies, increased wind, or thunder and lightning. Even if a thunderstorm is approaching from a far away, descend as far and fast as you can before taking shelter. * If you end up in a thunderstorm, spread out from other hikers and squat close to the ground and cover your ears until the storm passes. |
| **HAZARDOUS AIR QUALITY**   * Ozone and smoke can degrade air quality, mainly during summer. Smoke and poor air quality may irritate your eyes and respiratory system, and may worsen chronic heart and lung conditions. * If you have a respiratory condition, such as asthma, consult your doctor before strenuous exercise. * Consult with your home institution to determine trigger points for reduced outside work or evacuation. |
| **WILDFIRE**   * Forest fires are inevitable in Yosemite. * Sign up for emergency alerts before you arrive. * be prepared for evacuation at any time. * Create a “go bag” of your irreplaceable items and keep it with you, both at work and in the dorms. * Make an evacuation plan for where you will rendezvous with your group, where you will stay if the field station is evacuated, and how you will communicate with your home institution. |

**Include any additional resources: route/location maps, photos of general terrain and areas requiring extra caution, etc.**

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| **First Aid Reference – Signs & Symptoms of Heat & Cold Illness** | | |
| **Signs & Symptoms:** | **Treatment:** | **Response Action:** |
| **HEAT EXHAUSTION**   * Dizziness, headache * Rapid heart rate * Pale, cool, clammy or flushed skin * Nausea and/or vomiting * Fatigue, thirst, muscle cramps | 1. Stop all exertion. 2. Move to a cool shaded place. 3. Hydrate with cool water. | * Heat exhaustion is the most common type of heat illness. Initiate treatment. If no improvement, call 911 and seek medical help. Do not return to work in the sun.  Heat exhaustion can progress to heat stroke. |
| **HEAT STROKE**   * Disoriented, irritable, combative, unconscious * Hallucinations, seizures, poor balance * Rapid heart rate * Hot, dry and red skin * Fever, body temperature above 104 °F | 1. Move (gently) to a cooler spot in shade. 2. Loosen clothing and spray clothes and exposed skin with water and fan. 3. Cool by placing ice or cold packs along neck, chest, armpits and groin (Do not place ice directly on skin) | * Call 911 or seek medical help immediately. * Heat stroke is a life-threatening medical emergency. A victim can die within minutes if not properly treated. Efforts to reduce body temperature must begin immediately! |
| **HYPOTHERMIA**   * Feeling cold * Mild shivering * Increased shivering * Umbles, ataxia | 1. Move to a warm location. 2. Actively warm the body by drinking water, eating food, and exercise. 3. Change into dry layers and increase insulation.   If severe, actively rewarm with sleeping bags and transport to emergency services. | * If mild, hypothermia can be treated in the field. Prevention is key. It is easier to stay warm than to get warm. * If severe (uncontrolled shivering and umbles), initiate emergency services (call 911) |
| **FROST BITE and Non-Freezing Cold Injuries**   * Feeling cold/numb in extremities (e.g., feet, hands, nose, cheeks). * Partial or full-thickness freezing of tissues which appear white, waxy, and/or wrinkled. | 1. Cover cold extremities with DRY gloves, socks, face protection, etc. Change socks often. Do not sleep in wet socks. 2. Increase layering system for entire body to increase circulation to extremities. 3. Discontinue activity and actively rewarm tissues with warm water as soon as possible. Do not rub. 4. If severe, transport to emergency services. | * Prevention is key. Keep extremities warm by wearing appropriate footwear, keeping socks dry, and keeping the entire body warm and perfused. * Cold feet, hands, and face are a stop and fix scenario. Take the time to change into dry socks or gloves, change layering system, move into a warm area, and eat and drink. * Partial or full-thickness freezing should be treated in a hospital. |

**Signature of PI/Supervisor:**

I acknowledge this safety plan has been prepared for field work under my supervision.

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| **Name** | **Signature** | **Date** | **Phone Number** |
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**Field Team/Participant Roster - Training Documentation**

I verify that I have read this Field Safety Plan, understand its contents, and agree to comply with its requirements.

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| **Name/Phone Number** | **Signature** | **Date** | **Emergency Contact/Phone Number** |
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