

Field Research Safety Guidelines

University of Central Florida

Environmental Health & Safety

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I. Introduction

“Field research” is defined as UCF-affiliated work activities conducted primarily for the purpose of research, undertaken beyond the geographic boundaries of UCF or the urban environment, and/or outside the United States. These activities can expose participants to significant risks to health and safety, e.g., isolated locations, dangerous terrain, harmful wildlife, or high-risk activities. The purpose of these guidelines is to ensure that:

- Faculty conducting or overseeing field research develop and implement appropriate safety plans;
- Participants have an informed understanding of, and agree to assume, the risks of the field research; and
- Participants have an informed understanding of, and agree to perform, their responsibilities as participants in the field research.

Faculty or staff responsible for such research must document their plan using the attached *Field Research Safety Planning Record*. This record is to be filed with the principal investigator/academic supervisor with overall responsibility for the field research program. Field research activities must receive all necessary approvals from university bodies (safety committees, IACUC, IRB, etc.) before field research may commence. **For research that is strenuous, hazardous, or in remote locations (including any research out of the country), all participants must enroll in the UCF Medical Surveillance program, with copies of medical clearance kept on file by all participants and the department.**

II. Scope

These guidelines cover research, whether funded or not, that is conducted outdoors or away from campus. This includes, for example, research in jungles, forests, and beaches, but also includes door-to-door interviews in cities and towns. These guidelines are not intended for research conducted in other facilities that have established safety procedures, e.g., other universities, hospitals, national laboratories, zoological parks, etc. Certain field research activities, because of their inherent higher risk, require preparation beyond the scope of these guidelines. This includes any research involving diving (scuba or free), which must be conducted under the oversight of a certified dive officer at another institution. All participants in such activities must be appropriately certified.

III. Responsibilities

All participants in field research bear the responsibility for their own safety. The primary responsibility, however, lies with the Principal Investigator (PI) overseeing the research and the team leader who directly supervises the research on-site. This section outlines some specific responsibilities for safety in field research.

Principal Investigators

The principal investigator is the faculty member with overall responsibility for the field research program. He or she has the primary responsibility to develop and document safety plans, obtain all necessary approvals, provide appropriate training, ensure participant compliance, and maintain all documentation relating to the field research program. Thus, the academic supervisor is responsible for:

1. Identifying and assessing the health and safety risks associated with the field research project with Environmental Health and Safety (EHS) and occupational health;
2. Developing appropriate procedures to manage the risks;
3. Establishing the field team composition, including responsible team leadership;
4. Ensuring that team members have appropriate equipment and training, including training and/or licensure in equipment and vehicle operation;
5. Ensuring that team members understand the risks, risk control procedures, and lines of authority;
6. Obtaining informed written consent from team members (or parents/guardians for participants under age 18);
7. Enrolling all involved personnel in the UCF Medical Surveillance Program (required for research that is strenuous, hazardous, or in remote locations including any research out of the country);
8. Documenting the above including completion of the *Field Research Safety Planning Record*;
9. Maintaining the planning record and copies of medical clearances for all team members; and
10. Ensuring that medical clearance forms are available for emergency use in the field.

Department/Center Chair or Director

The chair or director is responsible for:

1. Supporting the academic supervisor's efforts to ensure compliance with these guidelines;
2. Designating a departmental contact person for all field research teams;
3. Providing Environmental Health and Safety (EHS) with all documentation related to field research activities;
4. Informing EHS of all adverse events related to field research activities; and
5. Directing the academic supervisor to maintain files of planning records and health forms for three years after completion of the field research project.

Team Leader

The team leader may be the academic supervisor or another person designated by the academic supervisor. The team leader is responsible for:

1. Directing the team's research activities;
2. Planning activities so that team members are appropriately rested;
3. Ensuring implementation of the risk control procedures established by the academic supervisor;
4. Dealing with any safety concerns that arise in the field; and
5. Maintaining regular contact with the academic supervisor and/or departmental contact, and informing them of any accidents, illnesses, or emergencies.

Team Members

Each member of the field research team is responsible for:

1. Fulfilling their research responsibilities under the direction of the team leader;
2. Following the safety procedures established by the academic supervisor;
3. Working safely and in a manner intended to avoid harm to himself/herself or others;
4. Reporting any identified hazards to the team leader;
5. Providing evidence of a satisfactory state of health and immunization;
6. Informing the academic supervisor of any health concerns;
7. Providing written consent of the above to the academic supervisor; and
8. When in doubt, always ask for further instruction before beginning a task.

NOTE: Any member of the field research team has both a right and duty to refuse to participate in any activity that he or she feels may endanger health or safety.

Solitary Field Research

Whenever possible, fieldwork activities should be performed in teams of at least two people. The “buddy” system is the safest way to work. Therefore, solitary field research is discouraged, particularly when it involves remote or hazardous locations or high-risk activities. However, when solitary work is unavoidable, stringent care must be taken to ensure training, competence, regular reporting, appropriate emergency procedures, and other precautions.

IV. General Considerations

Some useful general guidelines are available that may help in assessing risk, e.g., the University of California, Berkeley’s Safety Guidelines for Field Researchers (<http://www.ehs.berkeley.edu/pubs/fieldresearchsfty.pdf>). For most research activities, the following considerations should be taken into account in planning the field research:

1. Participants must be in a satisfactory state of fitness and health, be evaluated by UCF’s occupational health physician, and must have all appropriate immunizations (note that many immunizations or prophylactic treatments must be given well in advance of travel);
2. Appropriate health insurance and its limitations (for information on insurance issues when the research is conducted outside the U.S. please contact the Office of Risk Management at 407-823-0863);
3. First-aid supplies and manual, with team members trained in their use (appropriate training depends on the circumstances, e.g., Standard First Aid, CPR, use of automated external defibrillators, etc.);
4. Means of obtaining emergency medical care;
5. Appropriate personal clothing and equipment, and field equipment (e.g., safety glasses, gloves, steel-toed boots, helmets, etc.);
6. Food and accommodations;
7. Transportation, both planned and in case of emergency;
8. Information about the requirements of foreign governments and other jurisdictions concerning travel to, and research at, the site (including health and safety regulations);
9. Determination of responsible leadership for all teams;
10. Definitions of the tasks and responsibilities of each team member;
11. Appropriate training of team members;

12. Procedures for contacting the university and emergency help if needed (e.g., mobile telephone, radios, and a list of phone numbers);
13. Ensuring that participants carry their own health insurance information, emergency contact information, and personal medications;
14. Plan for emergencies including theft, illness, vehicle emergency, hurricane, etc.;
15. Research and plan for local risks (e.g., pests, extreme heat, disease);
16. Ensure that only qualified individuals operate any vehicle, including boats; and
17. Vehicles and boats must be inspected for appropriate safety equipment.

V. Additional Resources

1. Medical Care and First Aid

Principal Investigators are required to implement the following guidelines when conducting off-campus activities that involve employees and students, including field trips, excursions, and field station operation:

- i. A first aid kit must be available at all times during the activity or exercise (see Section 2 below).
- ii. At least one person who is trained in first aid must be present when an infirmary, clinic, hospital, or Emergency Medical Service response is more than five minutes from field activities.
- iii. If you are working from a field station, you should find out what the arrangements are for emergency care, i.e., local medical facilities, clinics, or other.

2. First Aid Kits

First aid kits must be provided for all off-campus activities. Environmental Health and Safety provides and maintains first aid kits for university buildings. Contact EHS for advice on the contents of a first aid kit. EHS can also give you advice if you need special equipment or medication. Kits and refills may be ordered from safety supply companies. EHS can supply a list of vendors.

3. Physical and Environmental Hazards

Many general physical and environmental hazards exist in nearly every location worldwide. All field researchers, regardless of location, should familiarize themselves with and receiving training from supervisors regarding the unique conditions and hazards that may be present in the areas where field research is occurring.

4. Animals and Pests

Dangerous animals and other pests are present worldwide. General safety rules can help protect you from these hazards. Follow these general guidelines:

- Keep garbage in rodent-proof containers and stored away from your campsite or work area. Food crumbs and debris may attract insects and animals;
- Thoroughly shake all clothing and bedding before use;
- Do not camp or sleep near obvious animal nests or burrows;
- Carefully look for pests before placing your hands, feet, or body in areas where pests live or hide (e.g., woodpiles or crevices);
- Avoid contact with sick or dead animals (however, when research protocol or animal welfare dictates the handling of sick or dead animals, appropriate safety measures will be implemented, e.g., use of gloves and snake sticks);
- Wear clothes made of tightly woven materials and tuck pants into boots;

- Wear insect repellent;
- Minimize the amount of time you use lights after dark in your camp or work site because they may attract pests and animals;
- Use netting to keep pests away from food and people
- Carry a first aid manual and kit with you on any excursion so you can treat bites or stings (if the pest is poisonous or if the bite does not appear to heal properly, seek medical attention immediately); and
- Be aware of the appearance and habitat of likely pests

5. Diseases

Viruses, bacteria, fungi, and parasites cause diseases in nearly every location worldwide. Some diseases, carried and transmitted by an animal, are known as “vector-borne” diseases. **Always consult with a UCF occupational health physician before travelling out of the country to learn about specific health risks for the region in which you will be conducting your research and appropriate prophylactic measures.**

6. Rodent Handling

Steps can be taken to reduce the risk of rodent-borne diseases. Most important: make the area unattractive to rodents. Cover or repair holes into a building to prevent unwanted rodents. If camping, keep the area clean of trash and store food carefully to prevent attracting rodents. Do not camp near rodent borrows. Please refer to the section on animals and pests for further tips on how to prevent rodent infestations. If rodent feces or dead rodents are discovered, some precautions will help reduce the risk of exposure to rodent-borne diseases when cleaning the area:

Dead rodents: using gloves, cover the dead rodent with a solution of 1.5 cups of bleach to 1 gallon of water;

Rodent feces: do not sweep or vacuum rodent droppings, spray the droppings first with a bleach solution, and then wipe up the droppings; if possible, wet mop the area with the bleach solution.

7. Other Diseases (Vector-Borne)

Many other vector-borne diseases may pose a problem when travelling out of the country. Always consult with a UCF occupational health physician to learn the specific threats of your location of study. There are other diseases to be aware of when traveling outside the United States. While risk of infection is generally low, it is important to be aware of them, and take the appropriate precautions to guard against diseases such as tuberculosis, HIV/AIDS, newly-emerging respiratory infections, rabies, and viral hemorrhagic fevers.