CONOVER LAB WILDERNESS
EMERGENCY RESPONSE PLAN

When faced with an emergency in remote areas, use the following flow charts and other materials as a guide for deciding how to respond to the situation.

If you are traveling or working extensively in areas with no cell coverage, please contact Peter Adler (peter.adler@usu.edu) in advance to discuss additional safety procedures.

Documents Included:
- Utah State University “Hazard, Accident, and Incident Procedures” flow chart
- Wilderness First Aid “Evacuation Plan Flow Chart”
- “Call-In Procedures for Wilderness Emergency” template (modelled after Wilderness First Aid protocols for reporting a medical emergency)
- Utah State University “Property Loss/Bodily Injury Report” form
- Utah State University “Vehicle Accident Report” form
- Climbing over and under barbed wire fences
- Working in summer conditions in the desert
- Driving and hiking in rough terrain
- Travelling in wilderness
HAZARD, ACCIDENT AND INCIDENT PROCEDURES

HAZARD observed with potential to cause harm to people, property or the environment.

Is it an EMERGENCY situation?

Yes: Call 911

No: Go to:
http://www.usu.edu/riskmgmt/hazard/42
@Main.htm and submit either a Service Request or a Hazard Report

INCIDENT occurs that either has or has not resulted in injury or illness to a person (any) or property damage or environmental harm.

Go to:

VEHICLE ACCIDENT occurs that either has or has not resulted in injury or illness to a person (any) or property damage of any kind.

Go to:

IF an INCIDENT results a person having a WORK RELATED INJURY

Report the WORK RELATED INJURY to USU Human Resources
Evacuation Plan Flow Chart

Is the injury or illness severe enough to require additional medical treatment? Make this assessment in a timely fashion.

- Yes -> Is the person unable to continue with the trip?
- No -> Can the person walk out on their own without aggravating their condition?

- Yes -> Can the available evacuation routes be safely traveled by the person?
- No -> This person needs a litter evacuation. Does the group have the skills, people, and equipment to safely evacuate the person?

- Yes -> Will walking out and carrying gear create additional Accident Potential for the person or the group?
- No -> Allow the person to hike out with appropriate group support and with gear.

- Yes -> Allow the person to hike out with appropriate group support, but do not let them carry gear.
- No -> Send appropriate members of the group out to secure professional help.
Call In Procedures for Wilderness Emergency

Calling In

1. Name and/or Organization: Utah State University Research Crew

2. Location (i.e. Area on Topo Map or Mile Marker on Road): _________________

3. Critical or Stable: _______

4. Medical or Trauma: _______

5. Do you copy?

Patient Report

- Our phone number in case we get disconnected is ________________________
- I have a ___ year old M/F who ________________________________
- Patient’s chief complaint is ________________________________
- Patient’s last set of vitals are
  - Heart Rate: ______________
  - Respiration Rate: ______________
  - Blood Pressure: ______________
  - Level of Responsiveness: ______________
  - Skin Color, Temperature, and Moisture: ______________
  - Circulatory/Sensory/Motor: ______________
  - Pupils Equal Round Reactive to Light: ______________
- Evacuation request ________________________________
Utah State University – Property Loss/Bodily Injury Report

Today's Date: ____________________ Date of Incident: ____________________ Time of Incident: ____________________

Exact Incident Location: ____________________
(Street, building, room, etc)

Reporting Person
Name: ____________________ USU Department: ____________________
Email: ____________________ Home Phone: ____________________ Work Phone: ____________________
Address: ____________________ State: ____________________ Zip: ____________________
City: ____________________

Incident Details
Police Called: ____________________ Police Dept: ____________________ Police Report #: ____________________

What happened?
Explain in detail the manner in which the incident or loss occurred. Please state the conditions present at the time of loss (e.g., weather, construction, cleaning).

Witnesses
Name: ____________________ Address: ____________________ Phone #: ____________________
Name: ____________________ Address: ____________________ Phone #: ____________________

For Bodily Injury Cases
Victim’s Name: ____________________ Phone #: ____________________
Address: ____________________
City: ____________________ State: ____________________ Zip: ____________________

Describe Injury: ____________________

Was medical treatment provided?: □ Yes □ No

For Property Loss
If the loss is structural in nature or involves equipment, include a list of the items damaged, lost, or stolen and an estimate of the repair/replacement costs. Include any photos, receipts, and documentation of the lost/damaged items.

Provide your preliminary plans for recovery and relocation (if applicable):

Signature: ____________________ Date: ____________________

Please submit this report and all supporting documentation to USU Risk Management
6600 Old Main Hill, Logan, UT 84322 - risk@usu.edu
Utah State University - Vehicle Accident Report

Today's Date: __________ Date of Accident: __________ Time of Accident: __________

Exact Accident Location: ___________________________

Nearest City to Accident: _______________________

USU Vehicle Responsible Department: __________________________
Lic. Plate #: __________ Veh. Year: __________ Make/Model: __________

USU Driver
Driver's Name: __________________________ Driver's Lic. #: __________ DL State: UT
Driver's Email: __________________________ Home Phone: __________ Work Phone: __________
Driver's Address: __________________________ State: UT Zip: __________
City: __________________________

Purpose of Vehicle Use: __________________________

Accident Details - Please attach police reports, drivers insurance exchange, or other documentation as applicable.
Estimated Speed: __________ Weather Conditions: __________ Road Surface: __________ Paved: __________
Police Called: __________________________ Police Dept: __________________________ Police Report #: __________

What happened?:

Description of Damages to Veh:

Describe any Bodily Injury:

Witnesses
Name: __________________________ Address: __________________________ Phone #: __________
Name: __________________________ Address: __________________________ Phone #: __________

Other Vehicle(s) - If there is more than one other vehicle involved, please submit additional report(s).
Driver's Name: __________________________ Driver's Lic #: __________ DL State: UT
Address: __________________________ Phone #: __________
City: __________________________ State: UT Zip: __________
Lic. Plate #: __________ Veh. Year: __________ Make/Model: __________

Description of Damage to Veh:

Describe any Bodily Injury:

Insurance Co: __________________________ Policy #: __________________________
Agent Name: __________________________ Agent Phone #: __________________________

Signature: __________________________ Date: __________

Please submit this report and all supporting documentation to USU Risk Management Services
6600 Old Main Hill, Logan, UT 84322 risk@usu.edu
Climbing Over or Under Barbed-Wire Fences

Concept:
Most of our field sites are protected by barbed-wire fences. It is necessary to climb over or under the fences to access the sampling plots. A past crew member accidentally hit their chest on a T-post when hopping over a fence and sustained a painful, but not serious injury. This happened when the “rung” he was standing on slipped out of place on the fence. Other crew members have caught themselves or their clothes on the fences as well. Caution should be used when crossing the fences to avoid injury or damage to clothing.

Primary Safety Concerns:
The primary concerns with crossing the barbed-wire fences include falling onto the T-posts or snagging clothing or skin on the barbs.

Procedure:
1. Before climbing over or under the fence, crew members should drop the field gear they are carrying and consider removing their backpacks as well (to remove excess weight that could shift when crossing over the fence).
2. If possible, crew members should consider crawling under the fence instead of climbing over to eliminate the risk of the “rungs” slipping and causing you to fall or hit the T-posts.
3. If clothing or skin gets caught, carefully disentangle yourself without resisting or pulling away from the barbs. If the skin is broken, clean and disinfect the wound and apply a bandage if necessary.
4. Personal protective equipment recommended is a pair of gloves to prevent injury to hands when grabbing the barbed-wire.

Contact Information:
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Working in Summer Conditions in the Desert

Concept:
Desert conditions in the summer can be unpredictable and dangerous. From pop-up thunderstorms to hot, sunny days, various health concerns can arise if the crew is not sufficiently prepared.

Primary Safety Concerns:
The primary safety concerns of working in the desert include dehydration, overexposure to the sun, heat exhaustion, hypothermia (if cold and/or wet), snake or insect bites, and other health problems.

Procedure:
1. The field crew should discuss the signs and symptoms of the major health concerns listed above and be prepared to administer care in the field. For example, a dehydrated crew member may appear tired, complain of thirst, be disoriented or easily confused, and/or not urinating at regular intervals. Other crew members should encourage the person to take a break, sip water regularly, and try to decrease their body temperature.
2. The crew leader is responsible for being aware of the physical well-being of the crew. Taking regular water and snack breaks and asking everyone how they are is a normal part of looking after the crew.
3. Every crew member should carry enough water to remain hydrated throughout the day.
4. Stay situationally aware of the insects and venomous snakes around you. Alert others to the presence of dangerous creatures so they can also avoid hazardous interactions.
5. If a crew member has a medical condition that would be difficult to address in the field (i.e. allergic to bee stings or has asthma), they should notify the crew leader and make sure they have their necessary medications on hand. If necessary, they should alert others on how to administer them.
6. Personal protective equipment (PPE) that is recommended includes a full-brimmed hat, long-sleeved lightweight shirt, pants, and sunscreen.

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Driving and Hiking in Rough Terrain

Concept:
Vehicle and foot travel over rough terrain requires heightened awareness of the dangers facing the well-being of the vehicle and the individual. Being comfortable with four-wheel drive and knowing individual physical limits will ensure a safer working environment.

Primary Safety Concerns:
The primary concerns with vehicular travel over rough terrain include getting a vehicle stuck, damaging a vehicle, and driver fatigue. The primary concern with foot travel is physical injury (i.e. rolled ankle, tripping, falling, or striking objects).

Procedure:
1. All drivers should be comfortable with four-wheel drive before attempting to drive over rough terrain. If not, they should switch out with a more experienced driver.
2. Driver fatigue is possible while driving on back roads because of the constant need for heightened awareness. If a driver is showing signs of stress or fatigue, they should switch out with another driver.
3. If a vehicle is stuck or damaged, the crew leader and crew should assess the situation. If they are unable to fix the problem and need outside assistance, they should seek help according to the communication plan.
4. If a crew member is injured while traversing rough terrain, the crew should evaluate the situation. The crew leader should do what they can to take care of the injury. If evacuation is necessary, the crew should follow the emergency response plan.
5. All crew members should evaluate their well-being and their surroundings. If they are unsure they are able to work safely in the environment, they should voice their concerns to the crew leader.
6. Crew members who have never driven in 4-wheel drive or need a refresher should consider watching a 4x4 training video such as the following:
   How to Drive Off Road 4x4 Part 1: https://www.youtube.com/watch?v=FcTTPV9JmIE. Start watching from 26-47 minutes, then from 51-55 minutes. Resume at 58:30 to the end. Keep in mind these examples are more extreme than most situations we will face in the field. Note: there are commercials dispersed throughout the video. If you have in earbuds, the volume increases dramatically for the commercials.
7. Personal Protective Equipment (PPE) recommended for rough terrain includes sturdy boots or sneakers and high-quality socks.

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Travelling in Wilderness

Concept:
Travelling to remote sites to conduct field work often involves limited to no cell service and long travel times to the nearest amenities and medical facilities. Not having easy access to nearby amenities requires preparation and a well-thought-out communication plan.

Primary Safety Concerns:
The primary concerns with working in the wilderness include limited communication, remote vehicle repairs, and emergency response in case of physical injury.

Procedure:
1. Before leaving Logan, the individual or field crew needs to discuss their communication options when they reach the field site. If cell service is not available at the site, they should consider carrying a SPOT unit or satellite phone in case they need to seek help. They should designate an emergency contact in Logan who will be able to coordinate assistance if necessary.
2. Make sure the vehicles are equipped with the basic tools necessary to deal with minor vehicle repairs out in the field. For example, spare tires and a jack should be in the vehicle in case a flat tire needs replaced.
3. Make sure the vehicles have enough fuel to reach the field site and return to the nearest gas station.
4. Crew leaders should train field technicians on how to react in a situation where a crew member is injured and needs medical attention.
5. The crew leader is responsible for maintaining an up-to-date Wilderness First Aid certification or comparable training. The USU Outdoor Recreation Program offers weekend training sessions throughout the semester.
6. Personal Protective Equipment (PPE) recommended is a serviceable first aid kit.

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CANOE AND KAYAK SAFETY REVIEW. Sign and return to Dr. Conover

Name_________________________________________________________________________

Signature______________________________________________________________________

Date___________________________________________________________________________

I can swim at least _______ yards without stopping.

By signing above, I acknowledge that:

___ I have read the Santa Fe College SOP for canoes and will follow its procedures

___ I am confident of my ability to swim to shore.

___ I am confident of my ability to use a kayak or canoe.

___ I will not exceed my ability by venturing too far from shore or the launching point.

___ I will refuse to do things that are beyond my ability, even if asked.

___ I will always wear a life jacket while on the water.

___ I will take an extra paddle, water, cell phone in a waterproof container, small bucket or pan to bail water, and a rope with me while I’m on the water.

___ I will not boat alone and I will make sure that both boats are close enough to help each other in an emergency.

___ I will make sure that everyone on the trip is a good swimmer, comfortable with canoes or kayaks, has filled out this form, read the required material, is familiar with First Aid, emergency procedures, and the signs of heat stroke and heat exhaustion. The material is on-line at www.sfcollege.edu under SPO canoe safety.

___ I will make sure to send Dr. Conover an email where I will be, who will be with me, when I plan to leave and return. Once I return I will email Dr. Conover upon my return. I realize that Dr. Conover does not check emails often and I will tell someone else (local contact person) where I will be, when I’m leaving and returning so they can keep an outlook for me. I will phone my local contact person as soon as I am off the water.