Planning Field Research Activities

Dr. Martyn Unsworth
Department of Physics / Earth and Atmospheric Sciences
Director, Field Research Office
Role of Field Research Office (FRO)

- Advocate for field researchers to University administration
- Provide information on how to be compliant with the OHS act
- Facilitate training
- Provide safety equipment at low-cost

Contact Us:
Office Location until March 15th: #3-107, RTF
Office Location after March 18th: #2-10, Materials Management
Phone: 780-492-8981
Website: www.uab.ca/fro
Historical perspective

• Pre-2004
• 2004 Alberta Government makes changes to *Occupational Health and Safety Act*
• 2006 Report by Dr. Brian Jones
• 2008 *Field Research Activities Committee (FRAC)* formed
• 2008 *Field Research Office (FRO)* opened
• 2010 University of Alberta *Off-campus and Travel (OCAT)* policy.
  - Recognizes academic freedom of researchers.
  - Balances this with legal responsibilities – especially when students are being taken in the field.
  - Tools to determine risk level
• 2018 Major changes to AB Occupational Health and Safety Act
You will satisfy the legal obligations if you ...

- Develop a “good” Field Activities Plan
- Hold daily meetings and keep a record in a log book
- Have two way communication device (preferably voice)
STEP 1: Determine the risk level

(a) Where are you going?

- Review travel advisory of destination
- Affects what procedures you must follow and the approvals you may need
- Can affect your insurance coverage
- Need to use the Government of Canada’s Country Travel Advice and Advisories web page

[link]

Exercise normal security precautions  LOW
Exercise high degree of caution  MEDIUM
Avoid non-essential travel  HIGH
Avoid all travel  EXTREME
Peru

**Last updated:** January 18, 2019 15:46 ET

**Still valid:** February 11, 2019 14:36 ET

**Latest updates:** The Health tab was updated - travel health information (Public Health Agency of Canada).

### Risk level(s)

**Peru - Exercise a high degree of caution**

[*Exercise a high degree of caution*](#) in Peru to serious crime, as well as social conflicts and strikes that may occur across the country.

**Regional advisory - Avoid non-essential travel**

Avoid *non-essential travel* to the following areas due to terrorist and criminal activity:

- the districts of Kmbrí, Pichari and Yllabamba in La Convención province in the department of Cuzco (the city of Cuzco and Machu Picchu are not affected)
- Huallaga and Tocache provinces in the department of San Martín
- the Upper Huallaga and Ene river valleys in the departments of Huánuco and San Martín
- Padre Abad province in the department of Ucayali
- Huacaybamba, Huamalle, Leocón Prado and Marañón provinces in the department of Huánuco
- Concepción and Satipo provinces in the department of Junín
- *Tayacaja province in the department of Huancavelica*
Colombia

Last updated: January 25, 2019 19:40 ET
Still valid: February 11, 2019 14:40 ET
Latest updates: Safety and security - peace talks broke down

Risk level(s)

Colombia - Exercise a high degree of caution
Exercise a high degree of caution in Colombia due to high levels of crime.

Regional advisory - Avoid all travel
Avoid all travel to the following areas due to the risk of kidnapping and violent crime posed by the presence of illegal armed groups and other criminal organizations:

- the area within 20 km of the border with Venezuela
- the area within 20 km of the border with Panama
- the area within 20 km of the border with Ecuador
- Buenaventura and Tumaco ports

Safety and security situation
STEP 1: Determine the risk level

(b) Who is going?

- Undergraduate students *(MEDIUM)*
- Graduate students *(LOW)*
- Volunteers (ask RISK MANAGEMENT)

These categories of participants require certain planning steps to be taken, and affect level of risk
STEP 1: Determine the risk level

(c) What activities will take place?

LOW : Activity with same risk as everyday activity

MEDIUM : Activity with higher risks than those encountered in everyday activity, but can be easily mitigated. e.g. most field research, off road travel
STEP 1: Determine the risk level

(c) What activities will take place?

**HIGH** : Activities that have the potential to expose participants to risks that are significantly higher than those encountered in daily activity. Risks can be mitigated with planning, training and standard operating procedures.  
*e.g. dangerous wildlife, remote locations*

**EXTREME** : Activity with substantial risk to participants, which cannot be reduced with strategic planning.
STEP 1: Determine the Risk level

- Combine the three factors (a)-(c)
- Overall risk level is the highest of (a), (b) and (c)

Review relevant UAlberta policy (OCAT)
  - Off-Campus Activity and Travel Policy
## Chart 1: Risk Assessment

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>1) Who is traveling?</th>
<th>2) What kind of activity are they doing?</th>
<th>3) Where are they going?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Graduate students engaged in research.</td>
<td>An activity that entails hazards or risk no greater than those encountered by participants in their everyday lives (e.g. meetings, conferences).</td>
<td>A location where Foreign Affairs and International Trade Canada Travel Reports indicate &quot;exercise normal security precautions&quot;. Typically travel within Canada is low risk. However, possible risks such as natural disasters and public health issues should be taken into consideration in determining whether the risk level should increase.</td>
</tr>
<tr>
<td>Medium</td>
<td>Undergraduate students. Graduate students not engaged in research.</td>
<td>Activities that entail a higher level of risk than individuals would encounter in their daily lives, but those risks are easily mitigated (e.g. most field research activities, off-road vehicle use, sharps use).</td>
<td>A location where Foreign Affairs and International Trade Canada Travel Reports indicate &quot;exercise high degree of caution&quot;.</td>
</tr>
<tr>
<td>High</td>
<td>Activities that have the potential to expose participants to hazards that are significantly greater than those likely to be encountered in their everyday lives but which can be minimized through planning, training, standard operating procedures, etc. (e.g. direct work with dangerous wildlife, travel or work in extremely isolated locations).</td>
<td></td>
<td>A location where Foreign Affairs and International Trade Canada Travel Reports include a Travel Warning that indicates &quot;avoid non-essential travel&quot;.</td>
</tr>
<tr>
<td>Extreme</td>
<td>An activity for which there is substantial risk to participants, which strategic planning cannot effectively minimize with any reasonable probability (e.g. activities that result in a high probability of an incident that could result in serious injury or death).</td>
<td></td>
<td>A location where Foreign Affairs and International Trade Canada Travel Reports include a Travel Warning that indicates &quot;avoid all travel&quot;.</td>
</tr>
</tbody>
</table>
STEP 2: Complete Field Activity Plan (FAP)

Best Practice:
- Always complete a Field Activities Plan
- Assists you to comply with Occupational Health & Safety laws

You MUST complete a FAP if:
- Your activities are deemed high or extreme risk and you are taking students

FAP Template available from FRO website
- Your FAP should be reviewed/updated each year
- Please use latest version of template

https://www.ualberta.ca/environment-health-safety/training/field-activities-plan
STEP 2: Complete Field Activity Plan (FAP)

- FRO can assist with completing the FAP
- FRO does NOT approve the FAP
- Sample FAPs available on the FRO website
- eLearning modules available to help you develop FAP

Approvals based on risk level
- Low (none)
- Medium (Supervisor/Chair)
- High (Supervisor/Dean)
- Extreme (Dean/Provost)
STEP 2: Complete Field Activities Plan

Completing a *Field Activities Plan* involves:

- Identifying specific research location and team
- Determining their qualifications
- Determining safety and communication equipment needed
- Lodging needs
- Conduct hazard assessment, identify mitigation controls, use [EHS Hazard Assessment Web Application](#) and [EHS Control Library](#)
Step 3: Training and equipment

- Training should be arranged and taken ASAP
- Check FRO website for the training we arrange
- Call FRO if you do not see what you need
- Defensive Driving now online
- Contact Fleet Safety Officer- Kenji Kinoshita (cell# 780.405.5201) for driver evaluations and to arrange ATV training – also see https://www.ualberta.ca/vice-president-facilities-operations/service-catalogue/transportation-and-parking/drivers-training/drivers-training-courses
Step 3: Training and equipment
FRO organizes courses, provides info on others:
- First aid, chainsaw, snowmobile, boat handling
- Takes requests for needed courses
- Some offered by the UAlberta
- Often partial subsidies available
Step 3: Training and equipment

- Satellite phones: $30/week, plus call cost
- inReach communicators: $20/week
- AEDs (automated defibrillator): free
- First Aid Kits: $5/week – all replaced with new kits no restocking fee!
- RESERVE EARLY, DEMAND IS HIGH

Note: bear spray no longer available. Researchers need to provide
Step 4: Daily Field Safety Log Book

- Obtain from FRO prior to fieldwork
- Log your daily safety meetings
- Record changing daily hazards
Step 5: While in the field

• Know your responsibilities
• See UAlberta EHS “Appendix B” Environmental Health and Safety Responsibilities (most recent approval May 28, 2014)
• Complete regular check-ins
• Fill in Daily Safety Log Books – have all participate in safety discussions
• Report incidents (see EHS presentation later this afternoon)
• Record unanticipated hazards so that next years Field Activity Plan can be improved
Step 5: While in the field

• Please remember safety comes first!
• The University of Alberta (Chief Environment, Health & Safety Officer) has the ability to stop work where there is an immediate and significant health and safety risk.
• See Appendix A of the EHS Policy
Step 6 : When you get home

- Debrief team about successes and problems of field practices
- Return equipment
- Properly repair and store equipment
- Store Daily Field Safety Log Book
- 10 years after fieldwork
Working with other programs

• Some researchers do field research with other organizations
• If they have established safety procedures then simply refer to these in your FAP
• e.g. US Antarctic Program, Antarctica New Zealand, CERN ....
• In other countries, need to follow legal requirements. Use judgement if safety standards are lower.
Security issues overseas
Security issues overseas
Security issues overseas

- Local partners are very important
- Minimize number of foreigners
- Dual citizens should be especially careful
- Planning trip before main fieldwork begins
- Supervisors need to be involved in the field
- Flexibility
- Be prepared to quit if the situation changes
Join our email distribution list to receive notices of training scheduled, new equipment to borrow, change to policies, etc.

If you checked it off when you signed in for the session, you will be automatically added to the list.

If not, email: fieldoff@ualberta.ca
TEN easy pre-planning steps for Field Research

• Read the applicable UofA Off-Campus Activity and Travel Policy.
• Determine your risk level from Appendix B of the Travel Policy (all medium, high and extreme level work MUST complete a Field Activities Plan (FAP). Go to Insurance & Risk Assessment's Off-Campus Activity & Travel page and use the Travel Planning Tool (right-hand side under resources).
• Complete the E-Learning Module on How to Create a Field Activities Plan
• ID hazards, consider the people, activities and location of your field project. You can access the EHS Control Library to find field-type hazards.
• Fill out the Field Activities Plan template for your project.
• Implement controls (Elimination, Engineering, Administrative) - look to EHS Hazard and Web Assessment App for help!
• Submit the FAP for approval by the PI if medium and high risk level. Contact the Office of Insurance and Risk Assessment to get their help to mitigate risks if extreme risk level. Send a copy to your department and keep a copy in the field.
• Request a Daily Field Safety Log Book from FRO.
• Write detailed records of weather conditions, road conditions, persons' behaviors, equipment issues, new hazards that would deviate from the FAP in the Daily Field Safety Log Book.
• Remember to fill out the Emergency Information Form for each participant to take with you in the field.

https://www.ualberta.ca/environment-health-safety/field-research-office/fieldresearchpreplanning
Questions?

Please contact the Field Research Office at (780) 492-8981
fieldoff@ualberta.ca
www.uab.ca/fro