Department of Botany

Field Safety Plan Form[[1]](#footnote-1)

**Part 1. Planning Record**

Today’s date

Has this safety plan been reviewed &/or approved previously? Y/N and date, if applicable
*If yes, please help expedite re-review by indicating any ~~deletions in strikethrough~~ and additions in red*.

**Trip or Project Name**

*(Make note of this for linking Participant Forms to their appropriate Safety Plan.*)

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Over the next 12 months, will this be ongoing work or a one-time trip[[2]](#footnote-2)?

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If a one-time trip, trip start and end dates

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If ongoing work, over what months will activities occur and how many days is a typical trip?

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Nature of field activity

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Is trip for teaching or research? (*If teaching, please complete Course Information below*.)

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Is trip local to Vancouver, within BC, within Canada, or international? (*Note: Prior to participating in field work outside of Canada, students must register their travel plans with the University at* [*https://safetyabroad.ubc.ca/*](https://safetyabroad.ubc.ca/)*.)*

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**Team Leadership** (*For definitions of roles and responsibilities, please see Botany Field Safety Policy, available at* [*https://safety.botany.ubc.ca/field-safety/*](https://safety.botany.ubc.ca/field-safety/)*.*)

Project Leader

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Will the Project Leader participate in the trip? Y/N

*If yes, be sure to designate an alternate External Contact in Part 2, below.*

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Trip Leader

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Field Safety Officer (*only if different from Trip Leader*)

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**Course Information (*if applicable*)**

Course number

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Course name

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Number of sections

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| --- |
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Number of students per section

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| --- |
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**Travel Information**

Country

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Immunizations Required   Yes/ No

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Geographical Site(s) or Region(s)

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Nearest Town(s)/City(ies)

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Means of Travel

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Accommodations

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List of Drivers[[3]](#footnote-3)

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Travel Itinerary Details

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**Participants**

*Add lines to list all participants for a research field trip or a non-local, course-related field trip. For a course trip to a local field site (i.e., for which there are no required immunizations or visas and participants are covered by MSP), please list all participants who are not already registered in the course.*

| Name | Email | Health Insurance(Y/N) | Required Immunization(Y/N/NA) | Visa(Y/N/NA) | Pre-trip Safety Training(s) Completed(Y/N/NA) | First Aid Training Level |
| --- | --- | --- | --- | --- | --- | --- |
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**Part 2.** **Communication Plan**

**Internal Communication Plan**

*This describes how members of the field team will communicate with one another, in the event of a planned or unplanned separation while on the trip.*

Trip Leader Phone Number

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Field Safety Officer Phone Number (*only if someone other than the Trip Leader*)

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Is cell phone coverage expected to be reliable? If not, what means of communication will be used?

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Does the group plan to be separated into subgroups without visual contact? Y/N

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If yes, please answer the following:

* What is the planned check-in interval?

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* What steps will be taken if a check-in is missed?

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* At what stage will someone outside the group be alerted if check-ins are missed?

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If no, please answer the following:

* What steps will be taken if the group becomes unintentionally separated?

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* At what stage will someone outside the group be alerted if the group cannot reestablish contact?

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**External Communication Plan**

*This describes how a representative of the field team will communicate with someone at UBC who is not on the trip.*

Name and phone number of participant responsible for communicating with External Contact (*This is usually the Trip Leader.*)

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Project Leader Phone Number

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Name and number of External Contact person at UBC, if not the Project Leader

(*This is where you can designate an alternate External Contact for trips in which the Project Leader participates*, *or for other situations when the Project Leader is unavailable.)*

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How will the trip team communicate with the External Contact who is not on the trip?

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External check-in schedule

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If external contact is not made at the designated time, please describe the steps to be taken (i.e., what will be done and who will be alerted). *A sample procedure to use in case of failure to check in is available below.*

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**Site Contacts**

*Please list contact info for any local site contacts (e.g., field station managers, property owners, park staff) or local entities (e.g., park headquarters), if applicable.*

| Name/Entity | Title/Role | Email | Phone |
| --- | --- | --- | --- |
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**Departmental Contacts**

*Main departmental contacts are listed here. Please add other UBC staff contacts, if applicable.*

Department Head: Lacey Samuels, 604-822-3554 /personal # emergencies only: 604-809-3449

Admin Director: Alison Munro, 604-822-4882/personal # emergencies only: 604-817-9472

Assistant to the Head/Admin Support: Isabel Ferens, 604-822-8524

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**Emergency Contacts**

*Some typical emergency contacts are listed. Please provide additional contact information for local first responders and emergency services.*

General emergency hotline\*: 911

*(\*Note that this is not 911 in many countries; please edit accordingly.*)

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Canadian Coast Guard, 24-hr emergency line in BC: 800-567-5111 or #727 or VHF radio Ch. 16 or \*16 on cell phone

(*For other locations in Canada, see* [*https://www.ccg-gcc.gc.ca/contact/emergency-urgence/search-rescue-recherche-sauvetage-eng.html*](https://www.ccg-gcc.gc.ca/contact/emergency-urgence/search-rescue-recherche-sauvetage-eng.html))

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Search and rescue, Canadian Pacific region: 250-413-8933

(*For other locations, see* [*https://sarcontacts.info/*](https://sarcontacts.info/))

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Nearest hospital(s):

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Police:

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Fire:

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**FAILURE TO CHECK-IN PROCEDURE (SAMPLE)**

In the event that the team lead has failed to carry out the evening check-in by the appointed time the external contact will:

**1. CALL** the Trip Leader’s cell number (or other contact method i.e., satellite phone)

**2. CALL** other Participants’ cell numbers

**3. EMAIL** the Trip Leader, cc’ing all supervisors and the other Participants.

If the team lead is unreachable/does not respond, the external contact on call will:

**4. CALL THE SITE CONTACT** (depending on day’s plans)

If the external contact on call has not been able to verify the team’s safety by **2 hours\*** after appointed time they will:

**5. CALL THE LOCAL EMERGENCY AUTHORITY** (i.e., 911, Search and Rescue, Coast Guard)

\*This time period is suggested, but may be adjusted based on field work information and judgement.

**Part 3. Assessment of Risk**

**Description of activities**

*Please provide a brief description of the fieldwork activities.*

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**Risk Assessment**

*For your planned field activities, use the risk matrix (Table 1) to assist you in determining level of risk associated with each potential hazard (Table 2). Hazards may be site- or task-specific, they may be insidious or apparent, they may have interacting or cumulative effects, and they have the capacity to affect individuals differently. Additional guidance is in Appendix I. Keeping these considerations in mind, please score each potential hazard based on the anticipated combination of ‘consequence’ and ‘likelihood’, resulting in a determination of low, medium, or high level of risk (Table 1).*

**Table 1. Risk Matrix**

**Likelihood**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Continuously or many times daily, expected to occur regularly under normal circumstances | Very Likely | **Medium** | **High** | **High** | **High** |
| From once per day to once per month, expected to occur at some time | Likely | **Medium** | **Medium** | **High** | **High** |
| From once per month to once per year, may occur at some time | Moderate | **Medium** | **Medium** | **Medium** | **High** |
| It has been known to occur but not likely in normal circumstances | Unlikely | **Low** | **Medium** | **Medium** | **Medium** |
| Not known to have occurred, but considered remotely possible | Rare | **Low** | **Low** | **Medium** | **Medium** |
|  | **Consequence** | Minor | Moderate | Major  | Extreme |
|  |  | Minor cuts, bruises, irritation or physical discomfort | Injury or illness requiring medical treatment  | Injury or illness requiring hospital admission and/or temporary impairment (less than 6 months)  | Injury or illness resulting in long-term or permanent impairment and/or one or more fatalities |

**Table 2. Potential Hazards**

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| --- | --- | --- | --- |
|   | **High** | **Med** | **Low** |
| **Natural Hazards** |  |  |  |
| Temperature Extremes  |  |  |  |
| Uneven/Slippery Walking Surfaces |  |  |  |
| Sharp Objects—rocks, coral, vegetation |  |  |  |
| Heights/Drop-offs (including high elevation) |  |  |  |
| Falling Objects/Obstructions |  |  |  |
| Tight Spaces/Narrow Openings/Overhangs |  |  |  |
| Darkness/Low Light |  |  |  |
| Strong Sunlight (including sunburn) |  |  |  |
| Foul Weather—wind, rain, snow, lightning, flash flood |  |  |  |
| Fire Hazard |  |  |  |
| Smoke/Dust/Fog |  |  |  |
| Toxic/Allergic Sources (vegetation, pollen) |  |  |  |
| Animals—insects, reptiles, mammals, other |  |  |  |
| Water/Current—streams, waves, tides, depth |  |  |  |
| Elevation (low oxygen) |  |  |  |
| Unpredictability of environment |  |  |  |
| **Transportation Hazards** |  |  |  |
| Vehicular Traffic—roads, railroads |  |  |  |
| Bridges |  |  |  |
| Route Conditions – Weather extremes |  |  |  |
| Route Conditions - rough (inc. flat tires) |  |  |  |
| Vehicle Condition |  |  |  |
| **Field Work Hazards** |  |  |  |
| Getting lost |  |  |  |
| Hiking/Walking |  |  |  |
| Climbing |  |  |  |
| Lifting/Carrying |  |  |  |
| Swimming/Snorkeling/SCUBA/Boating |  |  |  |
| Digging/Trenching |  |  |  |
| Use of Tools (including chipping) |  |  |  |
| Fatigue/Dehydration |  |  |  |
| Animal bites |  |  |  |
| Research/location specific additional risks:   |  |  |  |

**Mitigation Plan**

*For activities with hazards determined as 'High' or ‘Medium’ risk, please explain the protocols that will be followed to mitigate that risk. Following the hierarchy of risk control (Table 3), first consider removing activities determined to be ‘High’ risk. When it is not practicable or possible to eliminate a hazard with high risk, the next levels of control, such as substitution or administrative changes, can be applied. Note that the final level of control, personal protective equipment, is considered the least effective because it assumes that participants will be exposed to some level of risk.*

**Table 3. Hierarchy of risk control**

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| --- | --- |
|  | Example |
| 1. Elimination | Remove the hazard* e.g., use the 30-30 rule to cease activity if thunderstorms are approaching
 |
| 2. Substitution | Use an alternative* e.g., choose a longer approach route if it avoids steep drop-offs
 |
| 3. Engineering Controls | Separation of hazard* e.g., park to avoid crossing busy roads
 |
| 4. Administrative Controls | Change the work practice* e.g., require participants to have certain rest periods
* e.g., set alarms for reapplying sunscreen
 |
| 5. Personal Protective Equipment | Provide protective clothing and or equipment. |

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| (Mitigation Plan) |

**Part 4. Emergency Response Plan**

*Please describe the appropriate procedures that are to be followed in the event of an emergency.*

**If a team member is injured and can communicate:**

How will that member communicate their injury? Who will they communicate with, and how will that person respond?

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How will emergency help (e.g., paramedic) be gained if necessary?

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**If a team member is injured and cannot communicate:**

How will the other team members become alerted to this? Who will respond if this happens?

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How will emergency help (e.g., paramedic) be gained if necessary?

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**Evacuation plan**

Please list circumstances that could arise which would cause evacuation from the field.

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Can all of these circumstances be detected by the on-site team?  Y/N

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If no, fill out the following 2 sections:

Please give the name and contact information of the external contact who will communicate to the team that they must evacuate.

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Please give the name and contact information of the team contact who will receive this information from the external contact.

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Please describe the procedure for safe evacuation of all the team members. Include how it will be determined that each team member is safely evacuated.

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1. Template last updated June 1, 2021 [↑](#footnote-ref-1)
2. Multiple trips to the same site(s) for the same activities by the same people can be covered by one Field Safety Plan, provided activities and participants remain as specified. When minor changes occur, an addendum to a previously submitted plan can be added. Any significant changes to the activity will require the Project Leader to reassess risks and submit a new Field Safety Plan. Any new Participants must submit Participant Forms, and changes to the Participant list should be reflected on a revised Plan. A Field Safety Plan is good for 12 months. For ongoing or long-term projects, the Project Leader should submit a renewal each year*.* [↑](#footnote-ref-2)
3. Use of personal vehicles is strongly discouraged. If possible, UBC-owned fleet vehicles or rental vehicles are preferred. In the event of a motor vehicle accident in a personal vehicle, the individual’s ICBC personal insurance would be the primary coverage. The University’s ICBC insurance coverage would respond for an accident in a UBC fleet vehicle, provided the driver was a UBC authorized driver. For a rental vehicle, the driver should ensure they have third party liability coverage purchased either through the University, through their credit card, or through the rental company (see here for further details: <https://srs.ubc.ca/insurance/insurance-programs/automobile-insurance/>). [↑](#footnote-ref-3)