

A safety plan for glaciology working environments

Developed by the MARS Glaciology URGE Pod

Glaciologists at all training and career levels work in a variety of environments including, but not limited to, laboratories, private and shared university/institutional offices, and field sites of varying remoteness for wide ranging durations from days to several months. To promote the well-being and safety of researchers and foster accessible and inclusive working environments, there are several considerations that are transferable to glaciologists working all of these environments that are highlighted here. Some components of this safety plan rely heavily on [“Safe Fieldwork Strategies for At-Risk Individuals”](#) by Demery and Pipkin (2020) published in *Nature Ecology & Evolution*.

Risks & minimizing risks: Risk minimization begins with acknowledging, and discussing, potential risks for each research experience, especially in new or field-based work settings. This should be a team discussion, because most risks will depend on an individual’s experience in different environments, as well as medical history (including disabilities and mental health). Some standard guidelines include knowing:

- relevant medical history;
- emergency protocols (everyone should have relevant phone numbers);
- access to first aid kit and identification of who is trained in emergency care on your team;
- potential environmental and wildlife risks and how to mitigate against them;
- potential policies, laws, regulations, and political/cultural environments (discussed below)
- all team members having at least two “buddies” in the field team, and one off-site, that they are comfortable discussing potential issues with.

Policies, laws, regulations, and political/cultural environments: Be familiar with policies, laws, and regulations in your working environment(s). For example, in university or laboratory settings, it is important to be familiar with policies and political/cultural environments which may be very different than those of the surrounding community. For field settings and travel away from your primary workplace, what are the laws and customs? For example, is there a curfew?; what side of the road do people drive?; are there different customs based on perceived gender? The [State Department](#) hosts country assessments that are useful for getting a sense for entry/exit requirements, safety, local laws, health, and transportation. If you can’t easily find that information, ask someone who has worked in a similar environment.

Training: A number of specialized training would be relevant depending on the specific working environment; however, implicit bias and bystander training are strongly encouraged for everyone. For supervisors and instructors, training in mentorship and leadership are extremely beneficial considering many academic researchers and educators are not formally trained in leadership. If researchers are working in a laboratory, knowing what chemicals and potentially dangerous materials are in the space and how to handle them is imperative to safety.

Authority figures and supervisors: Identifying authority figures and supervisors who can answer your questions and aid you in challenging circumstances is critical to your safety as a researcher in all working environments. This will allow you to identify who you can ask questions and who can help you when you are in need.

Co-working, support group, and points of contact: While working alone might be more common in a university or laboratory setting, researchers working in the field should not be alone. If you are working alone, it is important to establish a support group and/or points of contact, who know where you are, know the risks, and are on standby if you need help.

Housing and basic needs: Supervisors should assist researchers in establishing safe housing accommodations before arriving at the long-term or short-term work site. A safe and secure housing location includes the following: researchers are able to secure food, safe travel to and from work sites, access to safe transportation, and supportive points of contact in the local community. Other considerations regarding the personal needs of researchers include, but not limited to:

- Bathroom availability
- Reliable access to communication modes (internet, phone)
- Knowing how to seek medical care
- Accommodating for personal care routines and needs

Getting to know “neighbors”: In office and laboratory environments, it is important to know who is working near you. In field settings, it is imperative to know who else is actively working and/or living nearby. Do not show up to a field site without making phone or email contact with landowners/site managers and, if relevant, obtaining a permit and/or written permission to be in that space. Knowing who is around will minimize any miscommunication that could lead to increased risk.

Working hours: Establishing your general working hours with your supervisor is a safety measure, as there might be different considerations if you are working at night rather than during the day. If you are working in a laboratory with chemicals, it is important to know what resources are available to you (e.g., Environmental Health and Safety), especially if you are working during off-prime business hours.

Proof of identity and position: It is important to carry identification (e.g., university identification card) and other proof of position if available at all times while working or visiting workplaces. Supervisors should supply an official letter of support for researchers doing offsite (i.e. away from primary workplace) with contact information. This provides additional credibility to the researcher, if and when they are approached and challenged. Have a point-of-contact for an authority figure that knows your position, and memorize their email and phone number. Supervisors should offer a business card template with your affiliation logo, your name, and your position. You may use or modify this template [here](#) that is the standard business card size (3.5 x 2 inches); these can be printed on cardstock, which is probably available at no cost by asking your workplace office administration staff. When possible in the field, it is wise to wear articles of clothing (e.g. shirt, sweater, hat) with your affiliation’s name or logo.

Additional safety resources:

- The [APECS-INTERACT Fieldwork Planning Handbook](#) discusses several safety considerations relevant for polar field work. Additional resources related to harassment and handling difficult situations are on p115.