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All High Mountain Institute employees, faculty, staff, apprentices, and volunteers should carefully review and familiarize themselves with the HMI Risk Management Plan. The Employee Guidelines, Risk Management Plan, and Curriculum Guidelines are the core documents at HMI and are interrelated to one another.

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2 Introduction

2.1 HMI History & Background

The High Mountain Institute (HMI) is a nonprofit educational institution. Based in Lake County, Colorado, 5 miles west of the town of Leadville and founded in 1995, the first Rocky Mountain Semester matriculated in the fall of 1998. HMI's defining program is the Rocky Mountain Semester (RMS), an academic and wilderness program for high school juniors. In addition to the RMS, HMI offers a variety of other programs, such as wilderness medicine, avalanche, and leadership training courses. HMI seeks to connect students and our community to the natural world.

2.2 HMI Mission Statement

HMI nurtures personal growth through interaction with nature and participation in a strong community. We promote intellectual, physical and personal development thru insistence on academic excellence, our philosophy of mentoring and apprenticing, and rigorous experiential learning. We seek to promote independent thinking and to develop skills of learning and habits of mind that both enhance self-reliance and transfer beyond the boundaries of HMI.

2.3 Risk Management at HMI

The health and welfare of students, faculty and staff is a priority at the High Mountain Institute. To that end, HMI's management of risk has many components, such as: the mission and priorities of HMI; trained faculty and staff; informed students; the curriculum; and our support services (i.e. equipment, transportation, and emergency coordinator system).

Engaging in activities in outdoor environments and on and around campus involve inherent and other risks that are part of our programs. Therefore, HMI cannot guarantee the safety of students, faculty, or staff. We endeavor to responsibly manage risks and inform students of the risks, knowing we cannot eliminate risks. Students understand that they share in the responsibility for their own well-being and for the well-being of others in the group, and should understand that they play an important role in risk management practices. Faculty and students discuss these issues in light of the shared endeavor to engage in responsible risk management practices. While risk is an inherent part of all HMI programs – HMI does not seek to replace good judgment and sound practices with an undue acceptance of risk.

This risk management plan is a living document. It cannot be totally inclusive, nor should we strive to have it be so. It simply provides an outline and guidance for consideration. Over time, there will be many refinements to this plan. Those refinements may be included within this document or solely be a part of the HMI risk management culture.

2.4 Risk Management Plan Goals

- To minimize the risk of fatalities and serious injuries or illness on HMI programs.
- To take a responsible approach to balancing the needs of our educational mission and the risks of the activities in which we participate.
- To encourage participation in the wilderness education community's efforts to further the field of risk management, especially for small programs and for programs that seek to combine both backcountry/wilderness and academic elements.

3 Roles & Responsibilities

3.1 HMI Risk Management Committee

The HMI Risk Management Committee consists of the Wilderness Programs Manager, and three non-HMI employees with knowledge in the field of risk management (currently Nancy Crane of Outward Bound Wilderness, Cooper Mallozzi of the Colorado Mountain College, Markian Feduschak of Gore Range Science School, and legal counsel Catherine Hansen-Stamp). It is the goal of this committee to meet once a year and review the risk management issues at HMI and offer suggestions for improvement. The Executive Director and Wilderness Programs Manager report on Risk Management related issues to the HMI Board of Trustees on an on-going basis.

3.2 Wilderness Programs Manager (WPM)

- Implements the risk management plan and practices at HMI.
- Acts as liaison between the Risk Management Committee and the Executive Director.
- Leads revisions of the HMI Risk Management Plan.
- Maintains records of all field related injuries, illnesses, and near miss reports.
- Reports data annually to the WRMC Incident Reporting Project.
- Develops ongoing training for faculty and staff. Training may include specific in-service days, pre-course briefings, conference opportunities, and non-HMI training programs.
- Works to improve risk management practices by reviewing field data, incorporating suggestions by faculty, and soliciting suggestions from outside sources.
- Serves on and chairs the HMI Risk Management Committee.

3.3 Executive Director (ED)

- Monitors Risk Management Plan relative to the overall goals of HMI and specific program goals.
- Plays an active role in addressing risk management with faculty and staff (via briefings, memos, etc.).

3.4 Head of School, RMS (HOS)

- Hires and evaluates faculty and staff, and makes decisions for continued employment and promotions.
- Plays an active role in addressing risk management with faculty and staff (via briefings, memos, etc.).

3.5 HMI Physician Advisor

Various HMI staff with the help of the HMI Physician Advisor (currently Dr. Lisa Zwerdinger) review and become familiar with each student's medical history and consider previous injuries, allergies, and medications. Additionally, the Physician Advisor reviews and approves the HMI Backcountry Medical Treatment and Evacuation protocols.

3.6 Emergency Coordinator (EC)

The Emergency Coordinator (EC) is a designated individual, usually a faculty member not going into the field on an expedition, who is available to facilitate emergency response to HMI expedition groups in the field. In addition to the EC, a designated backup EC (EC2), is on-call while courses are in the field.

3.7 Faculty on Duty (FOD)

Typically, while the RMS is in session and on-campus, one faculty member is designated as the "Faculty on Duty" or FOD. The FOD provides general oversight on-campus and is a key contact point regarding the on-goings for the RMS on any given day.

3.8 Expedition Leader (EL)

HMI expedition groups typically have one faculty member designated as the "Expedition Leader" or EL. The EL is hierarchically in control of the group in the field and responsible for the expedition group's success in striving to meet curriculum, expedition, and risk management goals.

3.9 Faculty

Most, but not all, HMI faculty are both outdoor educators and traditional subject area teachers. They oversee the day-to-day implementation of our risk management practices, both on campus and in the field.

3.9.1 Faculty Performance Expectations

HMI strives to hire faculty members who are experienced in the activities in which they will be involved. Faculty should strive to stay current on HMI guidelines and procedures. Faculty, staff, and students must make judgments and decisions as they conduct educational and adventure activities in changing environments. Decisions must be made on a variety of perceptions and evaluations, which by their nature are imprecise and subject to errors in judgment. Consequently, faculty and students should understand that there are risks involved in decision-making and conduct, including the risk that HMI faculty (or students) may misjudge a situation (i.e. student's capabilities, weather, terrain, water level, location, etc).

At times, an HMI expedition will be several days or more from definitive medical care. Problems related to weather, remoteness, and technical limitations may arise. Before leaving for the field, faculty should be familiar with road heads, evacuation and emergency related telephone numbers (for contacting HMI and local resources such as medical clinics), and generally prepare themselves for self-reliance.

3.9.2 Faculty and Staff Screening

HMI seeks qualified educators with relevant experience. The hiring process includes review of cover letters, resumes, and reference checks. For staff who regularly work in the field/backcountry, a minimum certification of Wilderness First Aid and CPR is required, although higher certifications are typical and preferred. Potential employees must certify to HMI that they have no felonies related to child abuse. HMI submits employee names for driving record review (completed by HMI's insurance agent). Basic medical screening is also conducted, in an effort to hire faculty who are physically capable of performing their duties.

3.9.3 Faculty Training and Development

As part of the development of our faculty, HMI provides both internal and external training opportunities for faculty as necessary and as time permits. The faculty is encouraged to develop their technical expertise by pursuing personal accomplishments. Informal meetings, memos, and expedition briefings educate the faculty about current and ongoing issues.

HMI facilitates ongoing education by offering financial support for faculty who attend professional seminars, conferences, and other professional development opportunities. In supporting professional development, HMI expects that faculty will gain additional knowledge and experience outside the HMI organization and introduce those skills, as appropriate, to the HMI community. HMI strives to document all continuing education and professional training taken by the faculty.

3.9.4 Faculty Evaluation

HMI encourages the ongoing informal review of performance between peers and supervisors for all faculty. Written evaluations typically occur at the conclusion of each expedition. Overall performance for each faculty member is formally reviewed at least once a year, with the intent of improving faculty performance.

3.10 Adjunct Faculty

From time to time, HMI may hire adjunct staff to work a particular expedition. We do this for several reasons: to meet a particular staffing need; to increase the experience level for a particular expedition team; and to evaluate our program.

3.11 HMI Staff

HMI staff includes both field and non-field faculty, office staff, administrative staff, apprentices, and volunteers. Everyone participates to some degree in the management of risk at HMI, with varying involvement.

3.12 Apprentices & Other Volunteers

HMI often has Apprentices or volunteers participating in our programs. Depending on the situation and the specific individual's skills, they may participate as either a student or faculty.

3.13 Students

All HMI students bear responsibilities in HMI's risk management. Once the student is enrolled, HMI sends more information about the program to the student. This packet of information includes information on needed equipment, various pre-arrival information, the Acknowledgment and Assumption of Risks & Release and Indemnity Agreement, medical forms, and assorted information about the program. This provides the student and his/her parent with information so that they can understand more about the activities and associated risks and hazards, and student and parent responsibilities. In most cases students receive instruction before structured activities. This should focus on various aspects of the new activity- e.g. environmental hazards, inherent or other risks of the activity, student responsibilities, community standards (school rules), and program or expedition goals. Students are given information so that they understand the importance of responsible behavior and good risk management practices, and understand that each student shares in the responsibility for his/her own well being, and the well being of those on the program.

4 Environments & Activities

In all the environments that HMI manages risks, HMI strives to inform students/participants of some of the hazards and risks they may face and address how they, individually, and the group, collectively, might mitigate the risks and hazards. Inherent risks are those that are integral to the activity, and include both desirable risks (e.g. deep powder snow for skiing) and undesirable risks (e.g. falling rocks, severe weather or sharp hooks for fishing). For a new environment or structured activity, HMI strives to provide an overview of some of the associated risks and hazards and possible tactics to mitigate the risks/hazards. However, as with all environments and activities, attempting to inform students of every possible risk/hazard is neither possible nor prudent.

4.1 Wilderness/Backcountry

Part of HMI's mission is to provide educational programs that inspire individuals to draw their own connections to the natural world. An important aspect of this is to develop the skills important to allow individuals to live and travel responsibly and comfortably in backcountry settings. To this end, HMI teaches students basic and advanced skills that allow them to engage the natural world on many levels.

HMI's progression of diminishing oversight and increasing responsibility over time provides students the opportunity to develop leadership, communication, decision-making, teamwork, technical, and observational skills. HMI strives to provide formal and informal opportunities for students to learn how to live and travel independently in the backcountry.

4.2 Service Projects

Service is an integral element in many HMI programs. On service projects, students are made aware of some of the known relevant risks and hazards and associated risks. For example, on a trail building service project students are taught to use the tools required for the project, made aware of lifting techniques, and reminded of the environmental hazards (sun exposure, weather, etc.).

4.3 On Campus Chores & Activities

Students are active participants in the daily and seasonal chores on our campus. Students participate in chores that may include shoveling snow, splitting firewood, general cleaning, and working in the kitchen. Each chore/activity often requires an appropriate introduction, demonstration, and evaluation that the student can do the chore/activity without undo risk to him/herself or others. Depending on the associated risks, the amount and intensity of this oversight varies greatly; e.g. little to no discussion regarding risks for sweeping the floor with a broom versus significant oversight and training on the process for splitting wood with an axe.

4.4 Academics

All HMI students are subject to rigorous academic standards, both on-campus and in the field. Often the academic curriculum is taught in backcountry environments. Faculty assist students by emphasizing the critical importance of responsible behavior and good risk management practices, despite potential academic burdens. Additionally, faculty strive to monitor the academic environment to mitigate the intensity such that the students' focus on academic endeavors does not distract them from meeting basic needs first.

4.5 Incidental Activities

On occasion, students take part in unscheduled, infrequent, or unplanned activities such as an impromptu bowling activity, visiting a hot springs, trips to town, sledding, etc. Before students engage in these activities, HMI may talk with students about some of the risks and hazards, if known, and how to address them.

5 Administrative Processes**5.1 Admissions & Enrollment**

The admissions and enrollment process is a key component in the HMI risk management program. Our pre-course information attempts to outline the format, curriculum, and some of the risks, hazards and dangers associated with HMI programs. The enrollment process, including the Acknowledgement and Assumption of Risks & Release and Indemnity Agreement and the medical form, assist in cultivating informed participants, and in screening students to attempt to determine whether students are physically and mentally capable of participating in HMI programs and activities.

5.2 Risk Management Audits**5.2.1 Internal Review**

Internal reviews are an ongoing process. Risk management concerns are addressed after each backcountry expedition in the debriefing process. Changes are implemented as appropriate.

5.2.2 External Review

HMI is an Association of Experiential Education Accredited Program and is engaged in an on-going external review cycle. Additionally, HMI strongly encourages all visitors to HMI to comment and provide feedback in their areas of expertise in writing. The HMI Risk Management Committee reviews incidents and near misses from time to time. Changes are implemented as appropriate.

5.2.3 Review and Updating Process

The HMI Risk Management Plan is typically reviewed annually with nominal changes incorporated. From time to time more significant revisions are incorporated (see 8.4.2)

5.3 Field Paperwork

Ongoing evaluation and feedback are encouraged at HMI. In addition, faculty and staff complete a daily course log and written evaluations at the end of each field section. The log and evaluations cover many aspects of the section that may include weather conditions, route & camp descriptions, activities, medical or behavioral concerns, contact with other wilderness users, and curriculum covered. If necessary, faculty also complete Incident Reports (medical, behavioral, near miss or otherwise), all of which are retained. The end of each field section/expedition includes evaluations (typically, students by faculty, faculty by students, and faculty of each other) and a debriefing.

5.4 Equipment

HMI maintains an inventory of equipment for group use and rental, and assists students in acquiring their personal expedition equipment. HMI equipment is selected for use in rugged conditions. The HMI equipment is inspected and undergoes regular maintenance.

5.5 Transportation

HMI operates vehicles for transporting students. Vehicles are maintained either by HMI staff or by reputable local auto mechanics. On a regular basis, HMI faculty use and review ground transportation policies and checklists. Basic records are kept for each of the vehicles used for transporting students.

5.5.1 Driving Guidelines

Driving guidelines are outlined in the Employee Guidelines.

6 Incident Response Procedures

This section is an outline of how HMI responds to incidents and serves as the HMI "Emergency Action Plan" and "Emergency Procedures". No set of procedures could prescribe specific responses for all possible incidents. These procedures set the standard basis for HMI's response to an incident; however, common sense and good judgment supercede procedures when prudent in the eyes of a given decision maker.

6.1 Chain of Command

For any incident, the chain of command-which determines the incident commander- is as follows for the two primary scenarios at HMI:

RMS In-Session

Executive Director (ED)
Head of School (HOS)
Wilderness Programs Manager (WPM)
Evacuation Coordinator (EC)
Faculty member on-duty (FOD)
Faculty and full-time HMI employees
Other HMI Staff

HMI Programs (RMS not in session)

Executive Director (ED)
HMI Program Manager (HPM)
Head of School (HOS)
Wilderness Programs Manager (WPM)
Director of Advancement, Director of Admissions, Business Manager
Evacuation Coordinator (EC)
Program Faculty and Staff
Any Available RMS faculty and full-time HMI employees
Other HMI Staff

During an incident, individuals involved look up the chain of command for decision-making and down the chain of command for help and assistance. During a serious incident, the designated incident commander is in charge of HMI's response to the incident, but still accountable and subordinate to the HMI Board of Trustees.

6.2 Initial Response Procedures

Responses to incidents vary with severity and location. The severity dictates the intensity and pace with which assistance is sought and who is informed at HMI. The location determines who is initially sought out for assistance. In general, HMI faculty and staff should initially take the time to carefully evaluate the situation (STOP & THINK), then consider a preferred course of action (MAKE A PLAN), evaluate the course of action (REVIEW THE PLAN), and finally begin responding to the situation (ACT ON THE PLAN). To date, HMI has never had an incident where excessive consideration and planning have in any way impeded effective response; however, on several occasions hasty responses and insufficient planning have increased complexity and the risks faced by those responding. Taking the time to make a plan and evaluate the plan's potential flaws is a key part of our system of incident response. As part of the response to an incident, faculty and staff should provide medical care to patients as per and within the limits of their medical training. If possible and prudent, the faculty or staff with the highest level of training should provide the care.

6.2.1 On Campus Incident

Minor Incident: Contact the faculty member on duty (FOD), decide on a course of action, and record as necessary in the daily log.

Serious Incident: Call 911 and activate the Lake County EMS system. Notify the FOD and the ED, HOS or WPM immediately. Post a lookout to direct EMS to the proper location upon arrival. Review the "Serious Incident Plan" in this document.

6.2.2 Off Campus Incident (non-wilderness setting)

Minor Incident: Contact the FOD and/or EC, decide on a course of action, record as necessary, and seek treatment as necessary and available in the current location.

Serious Incident: Call 911 and activate the local EMS system. Notify the FOD and/or EC and the ED, HOS or WPM immediately.

Review the "Serious Incident Plan" in this document.

6.2.3 Backcountry/Wilderness Incident

At HMI the backcountry and wilderness are defined as any locale more than 60 minutes from definitive care. For medical and evacuation protocols see the "HMI Backcountry Medical Treatment and Evacuation Protocols"

Minor Incident: Treat as necessary, record information in the field log, decide on a course of action (i.e. continue with course, begin evacuation process, etc.), review the plan, act on the plan.

Serious Incident: Treat as necessary, begin recording information, make a plan, review the plan, and act on the plan. Serious incidents in backcountry settings may require some or all of the following: contacting the HMI Evacuation Coordinator (EC) via cellular telephone (if possible), or satellite phone (if possible), sending runner teams for help, seeking assistance from other parties in the area, or self rescue. For any serious incident notify the Evacuation Coordinator and/or HMI staff as soon as possible. Review the "Serious Incident Plan" in this document.

6.3 Incident Logs & Records

HMI faculty should document Incidents and Near Misses. On campus incidents are recorded in the on-campus daily log. Incidents that take place in the field are recorded on the appropriate forms and in the daily field log. These forms are used to record the objective information associated with an incident. All logs and records should simply record the *known objective facts* of a situation. If possible and appropriate, faculty should also take photos to document the incident and surroundings. Analysis of the information can and should wait until the debrief, or in the event of a serious incident, the incident investigation.

6.4 Communications

Communication during an incident is very important. The guiding principle is that regardless of the form of communication, faculty, staff, and students are encouraged to be clear, concise, and detailed enough so that others may provide the needed assistance. Both the sender and recipient of any communications should take notes and record what was communicated.

The key information to impart is as follows:

- Your Name
- Patient Gender & Age (no patient/victim names on the radio)
- General type & nature of the incident
- Location of the patient(s)
- What is needed, requesting what kind of assistance?

Example: *"This is John Smith. I have a 16-year-old male with a fractured femur. Patient is located at the foot of the Sundance trail in Dark Canyon. I am requesting a helicopter evacuation."*

Whenever communications become complex or unsure, it is typical to simultaneously organize and send out a runner team to a telephone. E.g. EL sends a runner team if unable to contact HMI via satellite or cellular telephone after a few attempts.

6.4.1 Telephone

Contact the EC or FOD directly. HMI's main telephone number is: XXX-XXX-XXXX HMI's Fax number is: XXX-XXX-XXXX. HMI's emergency telephone number is: XXX-XXX-XXXX

6.4.2 Cellular Telephone

Cellular Telephones are not always reliable in the mountains. When utilizing a cellular phone for emergency communication, the procedure is to contact the HMI EC or FOD directly.

6.4.3 Satellite Telephone

Satellite telephones when available are preferable to cellular phones, however they are not always reliable. When using a satellite telephone for emergency communications, the procedure is to contact the HMI EC or FOD directly.

6.4.4 Written

When sending written messages, especially from the backcountry, faculty and staff consider various contingencies. All written messages should have duplicate copies- one for the group that goes out, one that stays with the rest of the group. When appropriate, include a marked map, and/or a timeline that indicates what action will be taken as time elapses.

6.4.5 Front County to Backcountry Communications

In the rare event that HMI needs to contact a group in the field HMI will attempt to send in a messenger or potentially a small plane to circle the expedition group and signal them to contact HMI. Contact HMI by calling the EC on a cell phone or satellite phone if available.

6.5 Evacuation Coordinator Systems

HMI has developed a response system, the Evacuation Coordinator System, to deal with emergencies in the field. An incident (injury, illness, emotional or psychological event) may require an individual's departure from an expedition. The EC's primary task and responsibility is to provide the support requested from faculty in the field. The EC is a member of the HMI faculty or staff on duty 24 hours a day when groups are in the field. Activating this response system is done by calling XXX-XXX-XXXX **and/or** calling the EC directly (to their home, work, and mobile number).

The Evacuation Coordinator works with the faculty and staff in the field to arrange support for the evacuation. This may include sending additional help to the group, arranging transportation from a road head, calling in air support, arranging medical care, and providing housing, meals, and supervision, if appropriate, once the individual is out of the field. In addition to the EC a backup EC (EC2) is designated and for each expedition and may be called on to assume the roles and responsibilities of the EC.

6.5.1 Evacuation Coordinator Responsibilities

- Review the EC Notebook prior to the expedition.
- Assist groups in departing HMI (leaving the campus clean and tidy).
- Be available 24 hours a day for the entire duration of the expedition to respond.
- Generally stay in Lake County (unless another home base is designated in advance).
- Check the HMI phone system for messages several times per day.
- Care for students evacuated from the field.
- Contact student families with basic information of the situation and updates as necessary.
- Assist groups in returning to HMI (de-issue and debriefing).
- Seek assistance from other HMI faculty and staff as needed to facilitate evacuations.
- Pass on these responsibilities to another qualified HMI staff member if incapable (e.g. sickness, on an evac, etc.).
- During the RMS: Promptly inform the Head of School (HOS) or Executive Director (ED) of all evacuations and EL contacts.
- During Non-RMS Programs: Promptly inform the HMI Programs Manager of all evacuations.

6.6 Field Evacuations

Evacuations are often complex and confusing. In general, faculty should make a plan, review the plan, and act on the plan. Expedition Leaders should use co-leaders to assist in reviewing the plan. It is often appropriate and educationally valuable to include students in both the planning and implementation of evacuations.

- Plans should be written down with copies going out and remaining in the field.
- Medical forms and documentation go with the patient.
- Plans should incorporate what to do if something doesn't happen or someone doesn't return as planned.
- Generally, the EC should assume that the judgments of the staff in the field are correct.
- Evacuation teams should travel prepared for extenuating circumstances.
- Evacuations of a single student accompanied by a single faculty member are discouraged, but not always inappropriate.
- Helicopter Considerations

Weather- Can it fly? Can it Land?

Landing zone- 100' x 100' flat and firm, place wind indicators (sock), check for & remove loose debris, approach/departure paths

Stay clear! 200', avoid the rear (pilot can't see you), only approach if asked to. Pilot is the boss!

7 Serious Incident Plan**7.1 Serious Incident Prevention**

Avoiding serious incidents is the intent of much of this document. Beyond the unknowable freak accident, there are only a few areas where the forces and energy transfer involved have the ability to create a serious incident. These are the most common situations where risks or hazards could kill or maim you or another staff member or student. All HMI staff should be particularly aware of situations where significant transfers of energy are possible. By minimizing, managing, mitigating, or eliminating exposure to these situations, we endeavor to reduce the likelihood of a serious incident occurring. Examples are as follows:

- Traveling rapidly (20+ mph) in vehicles, while skiing, glissading, etc.
- Exposure to extreme cold or heat without the means to maintain core body temperature
- Lightning
- Objects falling and hitting individuals
- Moving water such as river crossings or flash floods
- Falls from heights greater than one body length
- Volumic, anaphylactic, and septic shock

The key prevention strategies are:

- Endeavoring to inform students of the hazards so that they can attempt to avoid excessive or undue exposure, both in advance and/or when the hazards become known.
- Recognizing the presence of hazards and responding in some way to recognize or mitigate the risks, even if it is only declaring the presence of the hazards.
- Taking appropriate protective measures such as using helmets while top-roping, wearing seatbelts in vehicles, using appropriate clothing for the weather, loosening pack straps at river crossings, assuming the lightning position during a storm, changing layers for cold weather, rigorously treating patients for shock, etc.
- Ongoing evaluating the decision making capabilities of each member of the group.
- Maintaining excellent self care to increase your potential to effectively respond to an incident and maintain good judgment.
- Terminating an activity if the benefit does not appear to out-weigh the risks.

7.2 Serious Incident Plan Outline

The RMS is the dominate program at HMI, when in session the task assignments for each element are designated first and in parenthesis "()". HMI Programs, and any other serious incident occurring when the RMS is not in session follow the second set of assignments designated in brackets "[]". Once the Incident Commander is established, he/she should use his/her judgment to allocate tasks to the appropriate individuals, using the outline below as a guideline.

Ideally, the titled positions as noted in the Serious Incident Plan Overview take responsibility for the designated areas. Given that HMI is a small institution, the likelihood that one or more of these individuals is directly involved with the incident is high. Individuals directly involved in an incident (in the field on the expedition, on site when the incident occurs, etc...) ideally, should not participate in the Serious Incident Response. If an individual is unavailable, the IC should move down the chain of command to the next individual while incorporating his/her judgment as to how to best address the needs of the specific situation.

*** Serious Incident Occurs ***						
Approx. Timeline	Initial Response (As per Risk Management Plan)					
	Incident Commander (IC) Designated (IC = ED unless unavailable, then follow RMS In-Session chain of command, see section 5) [IC = ED unless unavailable, then follow HMI Programs chain of command, see section 5] IC BEGINS OVERSIGHT AND DELEGATION OF TASKS					
A.S.A.P	Field Operations Manager (WPM or EC) [WPM or EC]	Family Relations Manager (HOS or DA) [HPM or DA]	Communication Manager (ED) [ED]		Investigation Manager (Legal Counsel) [Legal Counsel]	
			Internal (BM) [BM]	External (ED) [ED]	Internal (WPM w/ Counsel) [HPM w/ Counsel]	External (External Team) [External Team]
0-48 Hours	Patient/Victim Evacuation Expedition Group Out-of-field Pull other groups from field?	Contact Next-of-Kin Invite Family to HMI &/or site Travel & Lodging Arrangements	Employees & Staff Board of Directors Legal Counsel Insurer Students Student Families	Initial Press Release: Brief factual incident overview only, no names	Collection of all Documentation Interviews Site Visit	Initiated by Legal Counsel
0-7 Days	Fact Finding Interviews CISD?	Provide Counseling Options Provide verbal overview of what happened to family directly	Remind employees re communication procedures. On-going communication as necessary to students & student families.	Press Releases as necessary & respond to media requests	Site Visit Data Collection Interviews	Site Visit Data Collection Interviews Review Information
0-4 Weeks	Provide Counseling Options	HMI representative to any Memorial Services	Basic information to alumni, school contacts, and general HMI contacts	Press Releases as necessary & respond to media requests	Review Information	
0-12 Months	Maintain Contact & provide appropriate support	Maintain Contact & provide appropriate support		If appropriate, incident overview to HMI community. Press Releases as necessary & respond to media requests	Draft factual summary for internal use	Draft Report to HMI HMI reviews External Investigation
6-18 Months	Maintain Contact & provide appropriate support. Provide External review Summary	Maintain Contact & provide appropriate support Provide External review Summary	Provide External review Summary to all employees	Provide External review Summary on request		HMI Publishes Summary of External Review

7.3 Incident Commander Overview

- Assume overall responsibility for HMI's response to a serious incident
- Designate individuals to assume management of primary tasks
- Oversee that tasks are being completed
- Final arbiter for disagreements regarding HMI's response to a serious incident
- Report to the HMI Board of Trustees on an ongoing basis via the board chair

7.4 Field Operations Manager Overview

- Complete the initial emergency response, evacuation of patient(s)/victim(s)
- Bring affected expedition group back to HMI
- Consider bringing in all expedition teams from the field
- Manage HMI community logistics on campus
- Collect and pass on all documentation to the Investigation Manager
- Under the oversight of the Investigation Manager, set-up fact finding interview(s)
- Consider implement a Critical Incident Stress Debriefing for the participants & staff involved in the incident
- Continue to care for the needs of the group, provide counseling options
- Distribute information to group when provided from the Communications or Investigation Manager

7.5 Family Relations Manager Overview

- Immediately contact the next of kin for the patient(s) and/or victim(s)
- Assume the role as the contact between the family and HMI
- Formally invite families to Leadville and/or incident site
- Implement travel and lodging arrangements for families (at HMI's expense)
- Consider venue for greeting family, HMI campus versus in town
- Provide counseling options on arrival (counselors, minister, etc.)
- In private with only the family present, provide a verbal overview of what happened (carefully plan this with the Communications Manager)
- Provide assistance for any patient and/or body transportation issues
- Attend any memorial services, consider bringing Board Chair and/or Executive Director and/or Head of School
- Maintain contact with family and provide appropriate support
- Provide family with a copy of the external review summary when completed

7.6 Communications Manager Overview

- Oversee all communications, both internal and external regarding the incident on behalf of HMI
- Inform and update the HMI Board, employees, counsel, insurer, students, and student families
- Respond to all media requests
- Provide initial and, as necessary, on going press releases
- Protect the privacy of HMI students and staff
- Inform, educate, and remind HMI students and staff about information exchange issues
- Once complete, provide External Review Summary to employees and as requested by others

7.6.1 Internal Communications

Internal communications are overseen by the Communication Manager but are a delegated task. Initially, it is important that the HMI community be aware of the incident and have an outline of the facts. It is also vital that the HMI community withhold any and all judgments of "why" until the investigations (internal and external) are complete.

7.6.2 External Communications

Any and all contact from the media must be directed to the Communications Manager and reviewed by legal counsel. It is important that HMI have a single voice and presence in the media for consistency and clarity. Press releases are often but not always a method to use for distributing information efficiently. Reminders regarding external communications with the media and others for the Communications Manager:

- Candor and honesty, are essential.
- Acknowledge any and all obvious problems and issues but not guilt or fault (leave that to the investigation).
- Express sorrow for their loss, verbalize regret, show empathy, and express sympathy
- Commit to reporting further information as it becomes available
- Exceed expectations (family's, community's, media's) regarding communicating about the situation
- Listen carefully to questions, think about an answer, formulate a clear and brief response, respond
- Provide short answers followed by explanation, "Yes,...then explanation"
- Do not lie. Admit when the answer is not known, "At this time we don't know..."

Sample initial press release language for a serious injury:

Leadville, Colorado – On May 19, 2004, a 17 year-old male was injured while scrambling to the summit of Homestake Peak in central Colorado while participating in a High Mountain Institute program. As a result of a fall, the student broke his right femur. After a 7 hour evacuation, the patient is stable and receiving medical care.

The High Mountain Institute is based in Leadville, Colorado and provides a variety of academic and wilderness based programs for teenagers and adults. General information about the High Mountain Institute is available at www.hminet.org. Christopher Barnes the Executive Director of HMI, will provide further information as available on request and/or via additional press releases.

Sample initial press release language for a fatality:

Leadville, Colorado – On May 23, 2007, a 16 year-old female student and a 28 year-old male teacher died as a result of injuries sustained in a fall while participating on a High Mountain Institute backpacking trip in Dark Canyon, Utah. Executive Director, Christopher Barnes expressed his "deepest sadness at the loss" and said "HMI is committed to initiating a careful investigation of the incident".

The High Mountain Institute is based in Leadville Colorado and provides a variety of academic and wilderness based programs for teenagers and adults. General information about the High Mountain Institute is available at www.hminet.org. Christopher Barnes the Executive Director of HMI, will provide further information as available on request and/or via additional press releases.

7.7 Investigation Manager Overview

- Designate an individual internal to HMI to complete an internal investigation for the Investigation Manager
- Employ an external review team to complete an external review of the incident for Investigation Manager
- Oversee the timely completion of both the internal and external investigations
- Work with any other HMI Legal Counsel, Executive Director, and Legal Counsel from HMI insurer to summarize the external review and disseminate the information as appropriate
- To the extent possible, maintain the product of investigations as privileged or protected information.

7.7.1 Internal Investigation

The goal of the internal review is to identify the sources of information, collect the information (investigate) and then summarize the information into an internal report of the incident. Primary information sources are individuals involved in the incident, documentation, and the site of the incident. All incident reports and original documentation must be kept only photocopies should be shared externally. The internal investigation report should collate and summarize the information from each of these areas in a simple and brief fashion. After review by the Incident Commander and legal counsel the report will be shared internally to staff, potentially influence future training and procedures, and may or may not be shared externally depending on circumstance.

7.7.2 External Investigation

Selection of the external review team should be approved by the Incident Commander and/or Executive Director with the intent of finding a lead investigator of significant stature in the industry who is independent of HMI. The Investigation Manager, through legal counsel, should employ the external investigation team to report directly and solely to HMI. HMI will review and summarize the report prior to release.

7.8 Serious Incident General Information

7.8.1 Notifying Next of Kin

It is vital that all individuals involved and aware of a serious incident withhold the name(s) of individuals involved until next of kin have been appropriately notified. In general, HMI discloses only the age and gender of an individual involved in an incident. Any employee faced with a need to disclose further information should contact the individual in charge of communication, or if unavailable the Incident Commander.

7.8.2 Information Issues

All employees must observe the procedures regarding who communicates what information to whom. The Family Relations Manager is designated to work with and communicate with the family. The Communications Manager is designated exclusively to communicate with all external requests, such as the media or unknown investigators. A serious incident triggers both internal and external reviews where analysis of fact will occur. All HMI Staff and employees must refrain from providing analysis or opinions on "why or how this could have happened" to anyone except HMI designated investigators (internal or external). Communication of basic factual summary information that does not include personal or privileged information informally as a part of individual employees emotional processing of the incident is acceptable. Under no circumstances should any employee impart personal information (name, address, medical history, etc...) regarding any student, employee, or other party related to HMI.

7.8.3 Legal Issues

Legal issues and requests from any legal representatives are handled by HMI's legal counsel and legal counsel designated by HMI's insurer. Immediately refer any and all such requests to the Incident Commander.

7.8.4 Critical Incident Stress Management

In the event of a serious incident and if deemed prudent, HMI may hire a professional to facilitate a Critical Incident Stress Debriefing (CISD) for the individuals involved in the incident.

7.8.5 Ongoing Counseling

After a serious incident, HMI will attempt to offer ongoing counseling to any and all individuals involved (including the patient, family members, students, and staff).

8 Other Information

8.1 Resources for Other Programs

HMI shares its risk management practices, plan, and experiences with other outdoor organizations. HMI keeps records and shares basic information about incidents (minor, severe, and near-miss) with other industry professionals and researchers.

8.2 Definitions

The following definitions are provided to clarify the meaning of the terms as used at the High Mountain Institute.

8.2.1 Guidelines

At HMI guidelines are the common outline for action and/or teaching. While faculty are expected to utilize their best judgment, the HMI guidelines are the basic expectations that faculty strive to meet or exceed. The two most significant resources for guidelines are the "HMI Employee Guidelines" and the "Wilderness Curriculum Guidelines"

8.2.2 Hazards

At HMI, hazards are situations, exposures, and events that could potentially cause harm. Hazards can be either subjective or objective. Objective hazards are environmental hazards common to the area you are in (such as steep terrain or falling rock). Subjective hazards are factors that can lead people to make poor decisions. Common subjective hazards include complacency, fatigue, inattention, overconfidence, etc. The interaction between objective and subjective hazards is what can sometimes lead to an incident.

8.2.3 Incident

An unplanned for or unintended, potentially dangerous, occurrence or condition that results in injury, illness, property damage, near miss, or other loss (or potential loss). [Note: this is the definition from the WRMC Incident Reporting Project]

8.2.4 Judgment

Consistent with comments on the value of instructor judgment contained in this Risk Management Plan, the Wilderness Curriculum Guidelines, and any other HMI guidelines or procedures, an instructor's professional judgment is an important element of any HMI activity or program. All HMI materials provide direction and guidance on HMI programming, but an instructor's professional judgment may, in a given circumstance, justify a deviation from this Plan, or any other HMI guidelines or procedures.

8.2.5 Minor Incident

An incident that *does not* threaten life, limb, or long-term well being of an individual but does cause some form of harm. Minor incidents may still require a response, such as an evacuation or a visit to see a physician. Examples of typical minor incidents: sprained ankle, minor burn while cooking, mild hypothermia due to exposure, homesickness. Examples of minor incidents which could convert to serious incidents (either quickly or slowly): lost student or hiking group, sudden onset of abdominal pain, etc.

8.2.6 Near Miss

A "close call". A potentially dangerous situation where safety was compromised but did not result in injury. An unplanned for and unforeseen event. A situation where those involved express relief when the incident ends without harm. [Note: this is the definition from the WRMC Incident Reporting Project]

In HMI terms, a "Near Miss" is a serious incident that almost occurred. Typically, "near misses" are remarkable in that they are atypical of the average experiences for students and staff. For example, seeing a recent avalanche slide path is not a near miss (because it is common), but unintentionally triggering an avalanche regardless of position is atypical and such events should be classified a near miss even if the actions of the group were entirely proper and avoided the occurrence from becoming an incident. Incidents are typically the result of a chain of events. When an incident almost occurs, except for one or two variables (broken links in the chain), and the potential harm is great, the occurrence should be considered a "near miss". Example: after several days in the canyons in rugged terrain, at a 4th class down climb where packs are being passed down, a student falls 7 feet but is unharmed. This is a near miss. HMI strives to collect data on near misses such that the institution can learn from these incidents, thereby improving our awareness and general practices.

8.2.7 Policy

HMI does not formally use the term policy and any reference should be interpreted as a "procedure".

8.2.8 Practices

At HMI the term "practices" is synonymous with guidelines.

8.2.9 Procedures

The term procedure is utilized at HMI to denote a formal framework and/or outline for accomplishing a specific task. Faculty are expected to follow procedures as closely as possible, and are held accountable for doing so. Deviations from procedure should be conscious and carefully considered acts. Typically, any deviation from procedures should be documented. Hierarchically, procedures supercede guidelines.

8.2.10 Protocol(s)

HMI uses the term "protocol(s)" only in reference to the "HMI Backcountry Medical Treatment and Evacuation Protocols". All other references should be interpreted as a "procedure(s)".

8.2.11 Risk

The probability or possibility of incurring a loss (injury or otherwise). Quantitatively, risk is the likelihood of an event multiplied by the severity. "Risk" is integral to outdoor, recreation, adventure or sport activities and challenging learning environments, and therefore integral to HMI's programming. Thus 'risk' can refer to the risks, hazards and dangers associated with engaging in these activities. (see definition of "hazard" above, and reference to "inherent risk" in section 4).

8.2.12 Safety

"Safety" is defined as "secure from harm or danger" and/or "free from risk." As stated above, risk is an integral part of all HMI programs and HMI does not guarantee safety. Thus, the HMI Risk Management Plan addresses our commitment to having trained faculty, informed participants, sound guidelines & procedures, reasonable precautions, and an institutional culture that supports prudent decisions. The many components of the Risk Management Plan work together in an effort to decrease the potential for injuries or accidents, or the severity of consequences, but cannot make HMI programs "safe" or "free from risk." HMI does not promise "safe programs" or an individual's "safety".

8.2.13 Serious Incident

An incident that significantly threatens life, limb, or the long-term well being (physical or emotional) of an individual.

8.3 Related Documents & Information

The following HMI materials are a part of HMI's overall risk management planning and are relevant to this Risk Management Plan:

Catalogs, Brochures, & Programs Flyers	Acknowledgment and Assumption of Risks & Release and Indemnity Agreement
Website	On Campus Daily Log & Off Campus Daily Log
Employee Guidelines	Incident Report Form & Near-Miss Report Form
HMI Wilderness Curriculum Guidelines	Evaluation Forms
Enrolled Student Information Packet & RMS Student Handbook	HMI Backcountry Medical Treatment and Evacuation Protocols
Medical Forms	Various internal memoranda, meeting agendas, and records
Field and Evacuation Coordinator Call Checklists	

8.4 Acknowledgements & Sources**8.4.1 Individuals**

Christopher Barnes, *Executive Director* - High Mountain Institute
 Molly Barnes, *Head of School*- RMS at the High Mountain Institute
 Doug Capelin, *Director*- Deer Hill Expeditions
 Kent Clement, *Professor*- Colorado Mountain College
 Markian Feduschak- *Executive Director*- Gore Range Natural Science School
 Will Friday, *EOE Director*- Crossroads School
 Melissa Gray *Director*- Wilderness Medicine Institute of NOLS
 Catherine Hansen-Stamp, *Attorney- Recreation and Adventure Law & Liability*- Golden, CO & HMI Legal Counsel and former Board Member, 2003-2007
 James Healy, (former) *Wilderness Coordinator*- RMS at the High Mountain Institute
 Jim Hutchison, (former) *Faculty*- Albuquerque Academy
 Drew Leemon, *Risk Management Director*- National Outdoor Leadership School
 Mike Maughlin, (former) *Program Director*- Deer Hill Expeditions
 Kirk Phelps, (former) *Wilderness Coordinator* - RMS at the High Mountain Institute
 Bradford Sawtell, (former) *Wilderness Program Director*- RMS at the High Mountain Institute
 Tod Schimelpfenig, (former) *Rocky Mountain Branch Director*- National Outdoor Leadership School
 Justin Talbot, *Wilderness Programs Manager*- High Mountain Institute
 Buck Tilton, (former) *Director*- Wilderness Medicine Institute of NOLS
 Dr. Lisa Zwerdinger, HMI Physician Advisor, 1998-present

8.4.2 Major Drafts History

Kirk Phelps, Christopher Barnes, and Molly Barnes wrote the first draft of this document in May of 1998. Special thanks to Drew Leemon and Tod Schimelpfenig, of the National Outdoor Leadership School, for their help in reviewing the original document. The first draft was derivative of *Risk Management at the National Outdoor Leadership School*, written by Tod Schimelpfenig and Drew Leemon, as published in the 1997 Wilderness Risk Managers Conference Proceedings.

A major revision in March and April of 2002 was organized and implemented by Brad Sawtell. This revision was significantly aided by the careful review and comments of the HMI Risk Management Committee. Thanks to Kent Clement and Markian Feduschak for their thoughtful comments and additions.

Nominal revisions were implemented as part of the Association of Experiential Education (AEE) Self-Assessment in June of 2002. After a review, site visit, and report by a team from AEE, HMI was accredited in November 2002. A significant element of this review process and accreditation addressed HMI's risk management practices.

A significant revision, reorganization, and addition of the Serious Incident Plan was implemented in the spring of 2003 by Christopher Barnes, Molly Barnes, and James Healy. Cathy Hansen-Stamp reviewed this revision. The general outline for the serious incident plan is conceptually derivative of the "NOLS Crisis Management Protocol" by Drew Leemon (source noted below).

In the spring of 2005 HMI implemented the "HMI Backcountry Medical Treatment and Evacuation Protocols". Nominal edits to this document (primarily cross referencing) were incorporated in July of 2005.

8.4.3 Sources

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