

Outward Bound® International, Inc.

Resource Manual



Part III: Safety Resources and Guidelines

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These safety procedures are designed as a resource for Outward Bound Centers to develop appropriate policies for their operations.



Safety Introduction and Table of Contents

The safety objectives of Outward Bound International are to:

- Prevent all fatalities, disabling injuries and serious illnesses.
- Reduce the rate of other accidents, injuries, illnesses and emotional trauma.

These *Safety Resources and Common Practices* are designed to assist Outward Bound Centers around the world to share their best safety management practices to achieve Outward Bound International's safety objectives. They are written to be guidelines for individual centers to develop their own safety policies. For those centers that need assistance, Outward Bound International will provide the necessary safety consulting through its safety reviews and resources to ensure all centers are working towards the best practices in safety management world wide. These safety resources do not cover emotional safety issues that are as important as physical safety issues. A separate resource on this will be provided in the years to come.

These resources would not have been made possible without the assistance of centers around the world. Centers gave both their instructor manuals and their time in evaluating these safety resources. In particular, thanks to the staff in each of these organizations: OBI Advisory Board, OBUSA safety department, the OBUSA National Safety Committee, OB Hong Kong (for generous funding and support), OB Singapore (for generous funding and support), OB Canada, OB Malaysia Lumut, OB South Africa, OB UK Trust, PCOBS, VOBS, HIOBS, COBS, TIOBEC, OB Australia, OB New Zealand, OB Czech Republic, OB Hungary and many more. In addition, resources from the American Mountain Guides Association, the British Canoe Union, the Association of Canadian Mountain Guides, COLREGS, Association for Challenge Course Technology, and the National Speleological Society and the National Caving Association (UK) were utilized.

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Definitions Used in this Document

To ensure the clarity of these resources, Outward Bound International has set out some definitions of roles and words. These are meant to assist schools in fitting the resources and practices to their particular school policies.

“Adequate”:

Meets the minimum standard that a professional operating in that country/culture would be expected to attain.

“Appropriate”:

- Suitable or proper.
- Operating in an “appropriate manner” means that skilled personnel will act within the level of their skill set in a reasonable and prudent manner.
- An “appropriate activity” means that it is well suited for the skill level of the student.

“Proper”:

- Accurate or correct.

“Approved”:

- By government/manufacturers standards.
- By the Safety Committee, Senior Management or Senior Field Staff of the organization.

“Program Director”:

The person with responsibility for hiring, training and certifying staff as qualified for operational responsibilities.

“Safety Committee”:

This is an oversight committee that monitors all aspects of safety at a particular center. It is usually chaired by a member of the governing board and potentially includes experts in appropriate disciplines who may not be board members.

“Senior Instructor”:

A fully operational Outward Bound instructor with sufficient experience and aptitude that s/he can train or mentor staff learning the craft.

“Staff”:

Usually this refers to people who will have supervisory responsibility for participants engaged in Outward Bound program activities.

“Policy”:

A binding, overarching safety directive adopted by an Outward Bound organization, designed to influence and determine safety related decisions

“Practice”:

The usual way of doing things that is suggested. Similar to a guideline.

“Standard”:

Standard is the absolute lowest level of action or inaction at which a business may operate. A business operating below the standard will be liable if a client is injured because of the low standard. Standard is legal term with legal ramifications

“Protocols”:

Protocols, a former medical term, is not quite at the level of standard. A protocol is in the process of being tested to see if it should become a standard. Protocols, as defined here, have a legal definition in the medical community.

“Guidelines”:

A suggested method of accomplishing a program activity, consistent with approved policy, that staff should consider using but may adopt alternatives.

“Procedure”

A specific instruction for accomplishing a program activity that staff is required to follow except for exceptional circumstances.

“New Program”

Includes any new program activities, or new program operating area, or new participant populations that a center proposes to utilize.

“Emergency”

Any serious incident or situation concerning health, injury, death, missing person, or extensive property damage involving Outward Bound participants, staff, guests, or property. Or, a situation that may attract extensive media attention.



Outward Bound International Safety and Quality Review Process

Mandates for Safety Oversight of OBI

The guiding standards for safety management come from the following resolutions passed at Council Meetings of Outward Bound International (OBI) by all the centers:

PROVISIONAL LICENSING

Approved at the First Annual General Meeting held in Thompson Island, September, 1997:

“After three years, or sooner or later, at the discretion of the Outward Bound International Council, the (provisional) licensee will normally be granted full license status, providing the entity has:

- Successfully and safely operated courses within the mission of Outward Bound.
- Remained solvent and has developed ongoing business plans;
- Outward Bound International Secretariat has completed a satisfactory on-site quality and safety review (the expenses to be met by the provisional Outward Bound Center).”

EXTERNAL SAFETY REVIEWS

Approved at the Second Annual General Meeting held in Krochlendorff, Germany, October 23, 1998:

“Every member of Outward Bound International, Inc., shall conduct an external on-site review of program safety at least once every two years. The composition of the review team, the content of the reviews and other operational issues shall be in accordance with guidelines to be prepared by the Executive Director and approved by the Board and the Council of Outward Bound International, Inc.”

SAFETY MANAGEMENT SYSTEMS AND ACCOUNTABILITY FOR SAFETY AND QUALITY REVIEWS.

Approved at the Third Annual General Meeting of the Council of Outward Bound International at their meeting at the Rutland Square Hotel, Nottingham, UK on Tuesday, November 2, 1999:

“Each member center shall have in place the following organizational structures and procedures before the next AGM and will confirm compliance with the International Secretariat accordingly:

- A Safety Committee that meets at least once a year and actively monitors the safety of the center programs;
- A documented accident investigation and reporting system that is reviewed annually by the Safety Committee;
- A crisis management plan approved by the Board;
- Written safety policies and procedures that cover all risk related aspects of program operation;
- Preparation and circulation of an annual accident and safety report;
- A medical screening process for participants;
- Published minimum instructor qualifications that have been adopted by the Board.

Resolved that the International Secretariat shall identify those centers that have not complied with the 1994 Quality and Risk Management Protocols, and the Outward Bound International Board is requested to follow up appropriately with those boards.”

RATIONALE FOR SAFETY REVIEWS

Periodic external safety reviews, by those not part of the management of a center, are an integral part of the risk management plan of an Outward Bound Center. While ongoing risk management is the responsibility of the center safety director, an external safety review provides the following benefits:

1. An external validation of the OBI risk management program for other OBI members, governance of the center, and the public.
2. Assurance that the Center remains abreast of standards of other practitioners undertaking similar activities and shares their best practices.



Outward Bound International Safety and Quality Review Process

OVERVIEW

An OBI Safety and Quality review uses a team of two to five external experts to assess the safety status of a center. The review process seeks to offer the advice of experienced practitioners on how safety of the center might be improved to meet or exceed the best practices of the profession. Safety reviews take place at 2-year intervals.

The review team will be led by someone approved by OBI as sufficiently experienced to conduct the review. Other team members will be chosen for their expertise in Outward Bound and in the type of activities being reviewed. Team members should be satisfactory both to OBI and the center being reviewed.

With the agreement of the Executive Director, suggestions for quality improvement might also be offered. The team will typically review risk management plans, interview managers and staff, and make a visit to audit program activity at a school.

The reviewers provide a verbal report at the conclusion of the review. Within a month of the review a written report is prepared which includes any formal recommendations for changes that affect safety. This report is distributed by OBI. Within two months of receiving the report the Executive Director and Safety Committee responds to OBI indicating if and how they plan to comply with these recommendations. In the event there is disagreement on a response to a safety recommendation the OBI Board Safety Committee will arbitrate the dispute.

RESPONSIBILITY FOR SAFETY REVIEWS

OBI has been charged with responsibility for ensuring that Safety and Quality reviews take place. The Board Safety Committee is responsible at each School for ensuring external safety reviews are conducted every two years. The Executive Director and designated staff at each school will support the Board Safety Committee in discharging this responsibility.

COMPOSITION OF THE REVIEW TEAM

OBI will recommend suitable leadership for external safety reviews. The review leader and staff of the center being reviewed select the safety review team members.

A typical safety review team may include:

- The program director of another center.
- A senior instructor from a different center
- A board member responsible for safety at the center being reviewed.
- A senior staff member from a similar non-Outward Bound program.
- An expert in a technical area being reviewed.
- An expert in risk management approved by OBI to lead the review.

The ideal team would be a group of experienced practitioners who possess good critical thinking, listening, and feedback skills. They should be objective, articulate, and diplomatic. Non-controversial reviewers should generally be sought so their views are more easily heard.

Review team members should agree to treat information obtained during the review with appropriate confidentiality.



General Safety Policies

Typically centers will have a list of overarching safety practices that are seen as highly important for the general risk management of the organization.

1. At no time should any life be risked to save or protect property or equipment
2. Program activities should conform to applicable state and national regulations and standards.
3. Center-wide risk management standards should be drafted by senior program staff, approved by the center's safety committee, *and followed by all staff and participants.*
4. Risk Management standards should be reviewed annually by the center's safety committee.
5. All participants and staff involved in Outward Bound activities should be medically screened for the course.
6. No participant should be permitted to participate alone (i.e., on his/her own, away from the group or instructor) in any of the following planned activities.
 - Mountaineering
 - Rock climbing
 - Water activities of any kind, including swimming, boating, and dipping
 - Caving
 - Expedition travel
 - Ropes course
7. Safety policies should apply regardless of the skill level of the participant.
8. A safety briefing which sets an appropriate tone should be part of every potentially dangerous activity. This briefing should include appropriate use of equipment.
9. All Outward Bound activities that an instructor is asked to perform should be within the limits of the instructor's capabilities.
10. Staff operationally responsible for students are should be personally familiar with and trained on the types of terrain upon which program activities will take place. However in areas of low risk or where previous experience is not possible, they should be fully briefed by a senior staff beforehand, who does have personal experience of the area, or has conducted a risk assessment of the area.
11. There should be safe instructor/student ratios on all activities.
12. Local operating procedures should be established for specific course elements or areas when appropriate.
13. Any person who does takes part in Outward Bound activities and who is not employed as program staff by the Center is hereby termed a participant. As such, that person or persons should adhere to all relevant safety policies and procedures pertaining to participants. Exceptions to this policy may be approved by the program director on a case-by-case basis.
14. No one should participate in any activity sponsored by Outward Bound without the specific permission of the program Director or her/his designee.
15. Participants should be protected by safety devices or techniques in situations where appropriate.
16. Equipment for emergency evacuation, evacuation plans and first aid should be available at all program sites and wherever students travel.
17. Drugs, other than for medical use, and alcohol are incompatible with the safety standards of an Outward Bound course. The use of drugs or the possession of drugs during a course will not be tolerated.

These safety procedures are designed as a resource for Outward Bound Centers to develop appropriate policies for their operations.



Hiking, Backpacking, Camping, and Swimming

GENERAL

1. Waist and sternum straps should be undone on all potentially hazardous stream crossings.
2. Potentially hazardous stream crossings should be reconnoitered first and then supervised by staff.
5. Close-toed shoes should be worn on all potentially hazardous stream crossings. Instructors should use their judgment regarding the use of helmets in stream crossing activities.
7. Students should demonstrate competency in route selection, first aid, and emergency procedures prior to unescorted travel.
8. Students should carry adequate shelter, food, water and clothes for the extent of their expedition with a small supply of emergency rations.
9. Students should wear footwear that reduces potential for injury while hiking and backpacking.

LOST AND ALONE:

1. Students should be briefed in the first 24 hours of the course as to the importance of staying together as a group and what they do if they become separated.
2. Participants should be given emergency whistles and taught how to use them if there is potential for them to be lost and alone.

CAMPING:

1. Training in the correct use of stoves should be carried out and all participants made aware of the danger of using stoves in or near tents.
2. Students should be instructed in environment appropriate low-impact camping practices.

SWIMMING AND DIPPING

1. Prior to removing their PFD while swimming, students should complete a swim evaluation. Students must have passed the swim evaluation prior to wading farther than chest high without a lifejacket.
2. There should be an appropriate ratio of staff to students while performing the swim evaluation.
3. Non-swimmers should wear their PFD when in the water during boating, dipping, swimming and other water activities.
4. All swimming and dipping sites should be reconnoitered by Instructors prior to students entering the water.
6. Swimming in PFDs in designated whitewater areas may occur only at the discretion of the senior whitewater instructor.
7. No diving or headfirst entry is allowed under any circumstance.
8. Footwear should be worn if there is potential for foot injury. Instructors should use discretion regarding the type of footwear.
9. There should be no swimming in the following situations:
 - Between sunset and sunrise (at night)
 - During lightening storms
 - In areas of known shark activity or where there is evidence of feeding activity
 - From sea kayaks
10. Dipping or swimming areas should have safe entry and exit, have distinct parameters defined by the staff, and should not be adjacent to fast-moving, deep water.
11. An instructor should supervise all dipping and swimming activities and have a rescue plan with appropriate equipment, students may not swim alone.



White Water Activities

The procedures in this section look at all whitewater activities Outward Bound Schools engage in including: rafting, kayaking, inflatable kayaking, canoeing and swimming in white water.

White Water: White water will be defined as any moving water not safely negotiated broadside with eyes closed.

GENERAL

- Swimming in moving white water is only allowed with instructor approval and when wearing a life-jacket. "Swimmer's Position" (feet up facing downstream) should be taught to avoid foot entrapment and injuries.
- There is to be no diving into rivers at any time.
- Whitewater paddlers should wear PFDs during all white water activities, this includes paddling, scouting rapids, lining and tracking and within 3 meters of swift water.
- Instructor personal PFDs should be approved by the senior whitewater instructor. Inadequate flotation, rotting fabric, poor fit and compressed flotation should be deemed unacceptable for whitewater activities.
- Appropriate river footwear should be worn at all times, to reduce the likelihood of foot injury and entrapment.
- Staff should review safety policies and procedures with students just prior to launching. (It is considered appropriate to delay rapid specific information to just prior to running white water). This briefing should include appropriate swimmer's position and "man overboard" procedures. Prior to running rapids, students should be briefed in:
 - River dynamics (including hazards)
 - Self-rescue drill, response to raft flips, and safety precautions (craft appropriate)
 - Safety and group management
 - Paddle signals
 - River running procedures and safety management
 - Swimming and rescuing of swimmers.
- When used, rain jackets should be worn underneath the lifejacket; hoods off heads in rapids.
- A properly equipped sweep boat should run last so that rescue equipment should be upstream for effective use should an accident occur.
- Crafts should run close enough together such that should one boat have problems, the other boats are in a position to offer quick assistance and/or rescue.
- Paddlers should vacate the river immediately if electrical storms come within a 5km (3 mile) radius – 15 seconds or less between thunder and lightning.
- Rescue Kits should be carried for all whitewater activities. At least one throw line should be a part of the rescue equipment.
- A party paddling whitewater should be of sufficient size and strength to effect its own rescues.
- Swimming minimum standards should be followed on whitewater.
- Instructors should prohibit any student (captain in rafting) from running a major rapid who:
 - Is not proficient enough at controlling his/her boat to safely negotiate the obstacles.
 - Has not shown sufficient regard for the river and its dangers to safely run the rapid.
- Each instructor on a whitewater trip should carry a river knife.
- Intentional rapid swimming is allowed as followed:
 - When organized as a course activity and supervised by staff.
 - In a rapid approved for swimming by the Senior White Water Instructor
 - With a pickup boat stationed downstream.
 - After a staff member swims through first.
 - If lifejackets and shoes are worn.
- Major rapids should only be run in daylight sufficient to enact appropriate emergency response.

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White Water Activities—Flatwater Canoeing

Whitewater Kayaking and Canoeing

This includes Inflatable Kayaks

1. Helmets should be worn during all whitewater kayaking and canoeing activities with the exception of expedition style canoe trips.

KAYAKING SPECIFIC STANDARDS:

1. Before paddling in moving water, each student kayak should be outfitted with adequate flotation and grab loops.
2. There should be a staff-to-student ratio of at least 1:6 during kayak sessions.
3. Wet exits should be practiced before any kayak activity. Wet exits, self-rescue, t-rescues, and basic strokes should be practiced before kayaking in current.
4. Student kayak instruction and practice is restricted to highly controlled areas specifically designated by the program director.
5. Spray skirts should be fitted for easy exit with grab loop exposed and in good condition.

CANOEING SPECIFIC STANDARDS

1. Canoes used for whitewater should have appropriate bow and stern painters that are accessible and should uncoil when needed. They should be coiled away from the paddlers feet (e.g. in a bungee on the deck, coiled with a quick release knot).
2. Use of thigh straps should be approved by the Program Director or Senior Staff.
3. Students should complete the Self-Rescue Drill before whitewater canoeing.

WHITewater KAYAKING

1. When onboard the raft students and staff should have both their legs inside the boat.
2. A qualified instructor should be in the position to take over control of each raft at all times and should take over command of the raft when conditions or student mistakes threaten the safety of the crew or may cause serious damage to the equipment.
3. An instructor should personally captain particularly dangerous rapids or any deemed a significant safety concern.

4. Boats should be checked for readiness prior to each major rapid run, including:
 - Proper inflation
 - Snug tie-downs
 - Safety stowed bow and/or stern lines
 - Fastened and tight lifejackets
 - Properly seated crew with adequate footholds
5. Night floats may be done on moving flatwater **ONLY** with permission of the Program Director.

Flatwater Canoeing

1. No canoe travel is permitted until the swim evaluation has been completed, unless instructors have prior approval from the Senior Canoe Instructor.
2. PFDs should be worn by all students and staff when canoeing except in areas approved by the Program Director.
3. Voice or whistle contact should always be possible between canoes.
4. Students should practice a capsizing drill on courses that will be longer than one day. This should occur within the first few days of travel.
5. All equipment should be fitted with sufficient buoyancy to support itself when water-logged with full permitted crew and must be equipped to approved safety standards.
6. All the canoes should travel close enough together to assist each other in the event of a capsizing.
7. Students should be trained and monitored in appropriate actions in the event of high winds or approaching storms.
8. Solo canoeing should be actively supervised and within sight of a staff member.
9. Night paddling should only take place under the following conditions:
 - The weather is clear and is forecasted to stay clear.
 - The water is calm.
 - The paddle does not involve an open crossing or whitewater.
 - Each boat has a light easily accessible.
 - The group has the maturity and skill to follow directions well.

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Sea Kayaking

GENERAL PRACTICES FOR SEA KAYAKING:

1. Type 3 approved Personal Flotation Devices with attached whistles & reflective tape that are appropriately fitted, fully zipped and clipped should be worn by students and staff at all times while on the water in sea kayaks.
2. Students should wear appropriate clothing for weather and water temperatures while sea kayaking.
3. A minimum of two (2) staff, utilizing single kayaks should remain within site of the convoy at all times.
4. No independent student travel is allowed at any time in sea kayaks.
5. The student to staff ratio should not exceed 6 students to 1 staff person at any time while on water.
6. Instructional staff should have practiced and demonstrated competency in capsize and rescue procedures and paddling techniques.
7. Staff boats should carry necessary rescue equipment, including but not limited to:
 - Tow belts
 - Rescue straps
 - Flares
 - Air horn
 - Signal Mirror
 - VHF radio
 - Instructor maps
8. The group should carry a weather radio, 2 spare paddles, a spare PFD, a spare spray skirt, and bilge pumps.

PADDLING & CAPSIZE TRAINING:

1. Paddle & capsize training should be conducted prior to travel outside a protected area.
2. As part of capsize training, all students are required to perform a wet-exit and re-entry of a kayak. A staff person is required to be next to the capsizing boat while the wet-exit is performed.

COASTAL TRAVEL:

1. Kayak groups should obtain marine weather forecasts a minimum of once every twelve hours during the sea kayak phase of a course. Kayak groups should maintain a weather log of all forecasts obtained during this time.
2. Kayak groups should travel as a convoy, in a pod formation and maintain conversational distance at all times.
3. Students should not kayak on open water when wind and/or wave conditions are beyond the level of student skill or at any time instructors judge conditions to be unsafe for their group (i.e behavioral problems, etc.).
4. Paddling through surf may only be conducted when (a) assessed by instructors to be within the ability of the group; (b) in a location free from obvious hazards (large rocks, dumping waves, etc.)
5. Kayak groups should remain within 1.6 km (1 mile) from shore unless making an open crossing.
6. Staff boats are to be in position at all times to be able to assist in any capsize situation.

OPEN CROSSINGS:

1. During crossings, sea kayaks should remain within 6 km (3.75 miles) of shore.
2. Crossings should only be undertaken when:
 - The weather is and is expected to remain stable and conducive to safe paddling.
 - The health and ability of the group is assessed as adequate.
3. While on water when storms are in the area, actively assess route in relation to time it should take to get to a relatively safe take-out location. Paddle close to shore and avoid open crossings during these times.



Sea Kayaking

COASTAL TRAVEL AT NIGHT:

1. Night paddling should only be undertaken when:
 - Sea conditions do not exceed Beaufort Force 2 (wind speeds in excess of 4 knots)
 - Sea conditions are forecasted to remain so for the following 6 hours
 - There is no fog and visibility is good.
2. No open crossings should be undertaken at night.
3. Each sea kayak in a convoy should have a headlamp or other light source accessible while engaged in night travel.
4. A sea kayak convoy traveling at night should not enter a designated boat channel.

COASTAL TRAVEL DURING TIMES OF LIMITED VISIBILITY:

1. Sea kayaks operating in situations of reduced visibility (less than 1.6 km or 1 mile) should raise a radar reflector and should remain in sight of all other kayaks at all times.
2. An air horn should be attached to the deck of each staff boat and be immediately accessible.
3. One prolonged blast of the air horn repeated every two minutes is required while traveling in and around harbors, docks and marked navigational channels in situations of reduced visibility.

EQUIPMENT REQUIREMENTS:

1. Sea kayaks should have bulkheads and be capable of providing adequate flotation to float awash and support the person(s) the kayak is designed to carry.

OTHER RELATED ACTIVITIES:

See Swimming Minimum Standards

Sailing and Seamanship

1. All commercial boat licensing regulations should be followed in each country where Outward Bound sailing activities occur. The COLREGS for avoiding collisions should also be followed.
2. Centers should have a safe staff to student ratio based on the size of the sailing vessel and student population served. If instructors are not on a boat, they should be close by supervising the activity with accessibility to a chase boat.
3. Prior to getting underway for the first time students should be briefed on person overboard procedures.
4. Every person engaged in water activities should be conversant with the action to be taken in the event of a capsize of the vessel that they are using.
5. Appropriate footwear and clothing should be worn taking into account the activity, weather conditions and water temperature.
6. Sailing craft should carry a means of bailing, paddling (oars) and anchoring.
7. Non-swimmers should wear a lifejacket at all times, except when changing clothes, at anchor, sleeping, or when deemed it is safe by an instructor.

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Sailing and Seamanship

8. Lifejackets are required to be worn at all times by all personnel when on the water in a sailing vessel. They should be worn when a person could be immersed in rough open water for a lengthy period of time. Exceptions to this policy for all personnel (students and staff) who have passed a swim test include:
 - On board motor vessels
 - When tied to a pier or float
 - At anchor in protected waters
 - When sleeping on the boats at night
 - When deemed a safety hazard due to heat related injury.
9. A buddy system should be used when students or staff must temporarily remove a lifejacket while underway.
10. Sailboats to be used for expedition style sailing should carry a first aid kit and it should be immediately available during all program activities.
11. Each vessel that is underway for an expedition should carry a means of communication for emergencies (VHF marine radio, cellular phone—if appropriate, flares, fog horn)
12. Students should be briefed on how to manage themselves and the boat in heavy weather. Staff should be skilled in managing the boat in heavy weather.
13. Throughout the voyage instructors and crew should maintain a weather watch from radio broadcasts and continual weather observations.
14. A lookout should be posted to prevent collision or running aground.
15. Stoves should be used carefully whilst a sailing boat is under way, students should be briefed in fire prevention if stoves are to be used on board.
16. When another vessel is towing a boat, the utmost care should be taken for both the boat, the people on the boat and the towing vessel. Country regulations should be followed in regards to towing.
17. When students are sleeping on an anchored boat, an anchor watch should be instituted under the following conditions:
 - When a change of weather is expected
 - In an exposed anchorage
 - In an anchorage with strong currents
 - When either staff or participants are not of sound mind and/or body.
18. When a vessel engages in night sailing, it should have appropriate lights as specified in the COLREGS , a radar reflector, a throwable flotation device (with a white self activating strobe light attached to it when underway at night), lifejackets with reflectors and a rescue line (all according to international regulations). Students should be assessed for skill level and readiness before engaging in night sailing.
19. Students should be briefed on the safety guidelines associated with rowing before commencing the activity.
20. Instructors should be either familiar with the operation area or they should carry the appropriate chart with them and consult it regularly.

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Climbing, Abseiling and Ropes Courses

1. Industry approved climbing helmets should be properly worn by staff and students in settings *where there is rock fall hazard* while setting up top rope anchors, belaying, climbing, abseiling, on tyrolean traverses, on ropes courses, bouldering, and as appropriate for initiatives. (There may be some instances in which it is appropriate not to have helmets)
2. Until students demonstrate mastery to the senior instructor, instructors should check all harnesses, knots, and carabiners as well as monitor belayers before allowing participants to climb.
3. Appropriate clothing and footwear should be worn for climbing, abseiling and on the ropes course. Loose jewelry and rings should be removed and hair should be tucked in before climbing, belaying and abseiling.
4. The climber in charge should have adequate safety gear present at the climbing site so that a rescue could be performed without delay.
5. All equipment should be checked by the Instructor before climbing, abseiling or ropes events commence.
6. Use of a climbing site, or creation of a new climbing site, should be approved by senior staff prior to its use.
7. Student climbers should have an overhead belay, unless they have been approved for lead climbing.
8. All participants and staff should have either a top belay or another back up system during rappels. (For example, fireman's pull, prussic, "third hand", etc.)
9. Participants should practice belay techniques before their actually climb.
10. Student belayers should have a back up rope handler on the first day of climbing and until they demonstrate mastery of belaying.
11. Staff and students should be clipped in near a cliff edge, in particular, when belaying, monitoring, and throwing a rope over the edge.
12. Belayers, whether at the top or bottom of a climb, should be secured to avoid lifting off the ground or falling (from above).
13. If climbing equipment other than the centers is to be used it should be checked by the climbing instructor or program director.
14. For top rope and abseil set-ups an anchor system of 2 or more independent anchors should be used.
15. During bouldering activities students should learn safe spotting techniques and safe bouldering heights.
16. Students should not boulder alone.
17. No participant may lead climb except with the permission of the senior climbing staff.
18. Equipment use should be logged and stored according to industry standards.
19. Everyone, unless in a designated safe area, should wear a helmet whenever anyone is up in the ropes course or on a climb.

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Climbing, Abseiling and Ropes Courses—Caving/Underground Exploration

20. Every time the ropes course is to be used by a student group, the instructor supervising the group should check all equipment for serviceability or damage. Safety risks or potential problems with the course should be reported to the climbing/ropes course coordinator or the Program Director immediately.
21. Ropes events should be thoroughly checked once a month when in regular use and before use after a dormant period. This check should be completed by the program director or designate.
22. Any new obstacle, event or alteration, which changes the character of the course, should be approved by the Program Director before it can be used.
23. A clear communication system should be established between belayers/spotters and climbers and at switch points on the ropes course.
24. Students should have a safety briefing for each particular element of the ropes course.
25. When supervising the ropes course and climbing activities, staff need to be attentive to the following hazards (and if necessary change the program operations):
 - high winds
 - lightening
 - any other severe environmental conditions
 - participants general readiness
26. The ropes course should be locked up and stored away when not in use to prevent unauthorized use.
27. The ropes course should be built and maintained according to industry standards.

Caving/Underground Exploration

1. Two instructors should accompany each group. The instructor in charge should be familiar with the cave or mine concerned.
2. Students should be instructed in recognition and treatment of hypothermia before a caving expedition.
3. Students must practice switching the torch (head lamp) on and off and the method of changing battery or carbide before starting a caving expedition
4. Due to the highly technical nature of vertical caving, cave leaders should have special approval from the Program Director for this activity.
5. Spotting techniques should be taught to the students at the beginning of the trip in order to help each other while passing by climbs and narrows. Easy climbs and narrows can be passed by continuously, and harder climbs or narrows an instructor must supervise each student's climb one by one. If a student (or students) performs the spotting on a harder climb an instructor should always be close enough to take over the spotting.
6. Abseils should follow the rock climbing standards.
7. All participants must wear helmets and have enough light with back up resources per person to sustain the trip through the cave.
8. Participants should be wearing suitable clothing and footwear for the conditions of the cave.
9. When a cave trip involves an abseil or ladder, students should have practiced prior to entering the cave.
10. Particular attention should be given to monitoring the high levels of anxiety and exertion which this activity can generate.
11. Parties should not be so large as to prevent adequate supervision.

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Caving—Tyrolean Traverses—Mountaineering

12. Only the listed approved sites can be used without permission of the Program Director or Technical Expert.
13. There should be an instructor or higher rank OB staff on the surface (surface watch) knowing the group's size, targeted cave and route, starting time and expected finishing time. The finish of the caving must be reported to the surface watch immediately. If the surface watch has not received any comforting information about the group after a designated period of time he/she should start the emergency process.

Tyrolean Traverses

1. Students should travel in a harness clipped to the travel rope with two locking carabiners. Ropes should be attached to the traveler so that retrieval could be effected from either side of the tyrolean.
2. The main tyrolean rope should be backed up by an untensioned second rope.
3. Once the system is in place, a staff person should cross first to test it and clear away any hazardous loose rock.
4. Staff should designate a new Tyrolean site only when authorized to do so by the Senior Staff or Program Director.
5. Arrangements should be made to protect participants close to the edges of the tyrolean.
6. All appropriate rock climbing practices should followed.
7. Staff should be positioned so that they can assist in retrieval or rescue during the traverse.



Mountaineering:

SNOW TRAVEL:

1. All students should demonstrate their ability to perform self-arrest (with packs if they will possibly be in a position to fall with a pack) before traveling without belay on snow slopes where a fall could result in injury.
2. Belays, fixed lines or roped teams should be used on steep terrain with a poor runout.
3. An instructor should lead all roped travel.
4. The maximum number of students roped together on rock or mixed terrain is 3, 4 on snow or glaciers.
5. Team arrest techniques should be practiced and competency demonstrated before such techniques should be relied upon.
6. Students and staff should wear helmets in the presence of any technical difficulty or objective hazard.
7. Instructors need to have avalanche assessment skills when traveling where there is a risk of avalanches.

GLACIER TRAVEL:

1. The standards for snow travel also apply to “dry” glaciers.
2. All glacier travel should be conducted in rope teams.
3. Participants should not travel on glaciers without staff supervision.
4. Wet glacier camps should be probed to establish boundaries, and a camp boundary should be established. Students may untie from the rope within these boundaries.
5. When traveling in rope teams students should use harnesses to attach to the rope (they should not tie in to a coil.)
6. When using carabiners to attach the climbing rope to a harness at least one locking carabiner should be used.

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Mountaineering—Winter Expeditions

7. Prior to snow-covered glacier travel where there is a potential for unexpected crevasse falls, students should be taught and demonstrate the following:
 - A strong self arrest.
 - Use of self arrest to stop a ropemate sliding down a snow slope.
 - Escape from pack while hanging from a rope (if pack is being used for a climb).
 - Ability to ascend a free hanging rope.
 8. Everyone, students and instructors, should carry the equipment required for their role should a rescue become necessary.
 9. Instructors need to instruct students on the importance of keeping slack rope between climbers at a minimum when traveling on a crevassed glacier.
 10. Instructors should always have rescue and self rescue equipment readily available in case of a crevasse fall.
 11. If heavy packs or sleds are to be used, instructors should consider using an additional support system for the pack to avoid inversion or problems should the participant fall into a crevasse.
3. Evacuation and safety equipment sufficient for likely emergencies should be easily accessible at all times.
 4. Rock climbing, snow travel and glacier travel standards should be followed as needed.

Winter Expeditions

(Includes skiing, snowboarding, snowshoeing, dog sledging and winter camping)

GENERAL WINTER TRAVEL:

- ICE CLIMBING:**
1. Everyone, unless in a designated safe area, should wear a helmet whenever anyone is climbing ice.
 2. All standards for rock climbing apply to ice climbing.
 3. Belayers should be positioned, as best as possible, so as to avoid falling ice or other dropped items.
 4. Students should be appropriately dressed and equipped for ice climbing activities.
 5. All climbing sites should be assessed prior to use for avalanche hazard.
- PEAK ASCENTS:**
1. All technical mountaineering ascents should be reconned by the program director or designate prior to student use.
 2. Participants should be trained in the necessary technical skills before undertaking a peak ascent.
1. Students should have appropriate food and clothing before embarking on a winter field expedition.
 2. Before students enter avalanche terrain the following curriculum should have been reviewed: decision making and risk management; avalanche theory; travel procedures for avalanche terrain, and avalanche search and rescue.
 3. Students and staff should use avalanche transceivers when traveling in avalanche terrain.
 4. When traveling in avalanche terrain, staff should directly supervise students.
 5. Each student and staff member should carry and receive instruction in the use of the following equipment: transceiver, probe or probe poles, and shovel.
 6. Transceivers should be checked for function and range before each use.
 7. For any potentially hazardous activity (going for water, etc.) students should use a buddy system to ensure the safety of all people at all times.
 8. Students may not travel unaccompanied in areas which may have suspect ice.
 9. Travel should be limited to safe ice (at least 4 inches thick).

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Winter Expeditions

WINTER CAMPING:

1. Stoves and lanterns may be used in well ventilated shelters when designated by staff.
2. Candles and stoves should be kept well away from flammable material.
3. Stoves, lanterns, and candles should never be left unattended when lit.
4. Students and staff should only work inside a snow shelter under construction when another person is standing watch outside with a shovel.
5. When sleeping a shovel should be placed inside the shelter for emergency use should the shelter collapse.

SOLO:

1. Students should have demonstrated knowledge of frostbite and hypothermia prevention, detection and treatment before solo.
2. Staff should assess environmental conditions and student responsibility to determine the appropriate level of supervision for each student on solo.
3. Staff should closely supervise construction and location of snow shelters used during solo.
4. On solo there should be at least 2 verbal checks per 24 hour period. A visual inspection for frostbite should be done if the conditions or students warrant it.

MUSHING:

1. Staff should be confident and competent in all aspects of dog team care and use before being sole supervisor of any dog team used by students or before solo mushing.
2. In any instructor pairing, one instructor should be qualified to handle the dogs on their own.
3. Students should participate in a dog handling and dog problems lesson before mushing with the dogs.
4. Each sled should be equipped with gangline, a snub line, a brake, a brush bow and 2 leashes. Other equipment should be suited to the distance and duration of the trip.
5. In an emergency, the safety and survival of dogs should be a secondary consideration. No student or instructor should risk their life or limb in the attempt to save dogs.

SKIING AND SNOWBOARDING(ALL APPROPRIATE STANDARDS APPLY TO SNOWSHOES AS WELL):

1. When terrain would make the consequences of a fall serious, students should take off their skis or board and walk.
2. Students should be supervised by staff when skiing, snowshoeing, or riding in the backcountry.
3. Staff should approve all routes and slopes prior to student use.
4. Ski and board retention straps should be worn at ski areas.
5. Students should be briefed on ski area etiquette and safety prior to skiing or boarding at a ski area.
6. All instructors should be competent skiers (snowshoers), with the skill and endurance to ski (snowshoe) out for help in the case of an emergency.

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Outward Bound Course Elements

COURSE START:

1. Instructors should inquire, and make note of, any medical concerns not noted in student medical forms and any medical changes that may have occurred since the medical form was submitted.
2. Instructors should check in with students regarding prescription drug use, supply and dosage, and should determine a plan for monitoring prescription drug use.

SOLO:

1. Students should be briefed on emergency procedures during the solo activity and know how to contact the instructors at their base camp.
2. Students should have adequate shelter, food, water, clothing, footwear and an emergency communication device (e.g. whistle) while on solo.
3. Students should be checked at least once per 24-hour period by instructors who should carry with them a first aid kit in case of emergencies.
4. Instructors should outline the boundary of the student's solo site and inform students to stay within their boundaries.
5. Students should be briefed not to engage in potentially dangerous activities during solo (e.g. climbing, swimming, hunting, building fires, carving wood, eating wild foods, etc.)
6. Solo should not be longer than three days and three nights (Instructors should consider a shorter solo for younger students).

UNACCOMPANIED TRAVEL:

1. Before a participant group may travel unaccompanied, instructors should be satisfied that appropriate levels of skills, knowledge and experience exists within the group to ensure a reasonable chance of success, and that safety will not be compromised. The instructors need to satisfy themselves that the group has:
 - Navigation Skills
 - First Aid/CPR skills
 - Group management and leadership skills

- The maturity to make sensible decisions
 - Emergency procedures theory and practice.
 - Knowledge of how to avoid environmental hazards
2. The group of students should file an outline of the intended route with their instructors prior to departure.
 3. A minimum of four students should be assigned to each unaccompanied expedition group unless agreed upon by the Senior Instructor.
 4. An unaccompanied group should be checked by staff at least once in a 24 hour period.
 5. Groups traveling unaccompanied should not travel on terrain any more hazardous than that which they have previously traveled on course.
 6. Unaccompanied groups may not split up unless it is an emergency.

SERVICE PROJECTS:

1. Participants should be instructed in the correct and safe way of using tools and any other potential hazards during the project.
2. Close supervision is necessary at all times to identify unsafe practices or conditions
3. Participants and staff should wear appropriate safety equipment, including appropriate footwear.

ENDURANCE ACTIVITIES:

1. Participants should be briefed on endurance activity route and any known hazards.
2. Checkpoints and a staff "sweep" should be used for endurance activities.
3. Students should have access to first aid along the route.
4. Students should receive instruction regarding adequate hydration and nourishment before the activity.

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Motor Vehicle and Vessel Use

MOTORIZED BOATS:

1. Motorized safety boats should only be driven by staff approved by the program director or waterfront director.
2. Boat driving licenses should be carried by the driver at all times while driving the boat.
3. Motor boats should be well maintained and any damage or defects reported immediately.
4. Motorized safety boats should carry appropriate safety equipment including: first aid kit, flares, VHF radio, fire fighting equipment, paddles, and life belts/vests, etc.
5. When operating boats around people in the water, care should be taken to keep the propeller away from those people.

AUTOMOBILE DRIVING:

1. Drivers of center vehicles should be approved by the Program Director and have the appropriate license for the class of vehicle to be driven.
2. Passengers should always be seated and seat belts worn whenever a vehicle is in motion.
3. Drivers should obey all traffic laws and driving regulations.
4. Staff should be appropriately trained for the use of trailers and hitches and approved by the Program Director.
5. All vehicles should be equipped with appropriate safety and emergency equipment.
6. Drivers may not drive under the influence of any intoxicating substance or beverage or without adequate sleep.
7. Consumption of intoxicating substances and/or beverages is not allowed while driving a center vehicle.
8. All cargo, emergency equipment and gear should be secured in a fashion to ensure a clear emergency exit for all passengers and to prevent its shifting and the consequent possibility of accident or injury during the operation of a vehicle.
9. Legal penalties incurred by driver violations should be the responsibility of the driver.
10. Any defect or suspected defect with a vehicle or trailer should be reported immediately to those who maintain the vehicle.
11. All accidents should be reported to the Program Director.

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