Section 6. General Considerations for Higher Care Activities

Prior to using this section to plan an activity, be able to confirm the following:

- ☐ I have at least a basic familiarity with the content in Section 1 (Introduction) and Section 2 (Risk Management Primer) of this document.
- ☐ I have a solid understanding of the material in Section 3 (General Considerations for Offsite Activities) and any relevant subsections in Section 4 (Special Considerations).
- ☐ I have a solid understanding of any relevant material in Section 5 (Local Off-site Activities).

Higher care activities in this document refers to adventure pursuits, some aquatics, and/or out-of-province or international travel. The activities involve greater inherent risks, and commitment to participation at higher levels, over longer durations and/or in more demanding and/or remote environments than covered in the Level 1 Manual. While the injury rate associated with these activities is typically low, the consequences of injury incidents in these contexts can, and on occasion, have been severe, including permanently disabling injuries and fatalities. As such, these activities and environments require more specialized awareness, planning, instruction and leadership than local, lower risk activities.

There is a body of knowledge (theoretical and practical) that applies to instruction/leadership of these higher care activities and in these environments. In this section, the fundamentals of this body of knowledge have been distilled and applied to school offerings.

The term 'adventure pursuits' refers generally to outdoor activities related to self-propelled travel on land, water and snow or ice (e.g., hiking, canoeing, skiing). Adventure pursuits may occur in the community (e.g., climbing on an artificial climbing wall), but are most often taken to sites off the school home base, up to and including extended wilderness travel.

These guidelines are not a substitute for the independent decision-making of experienced, capable teachers/leaders. The activities here frequently require that the person in charge and those helping supervise have training and experience in the activity and environment. However, everyone has some gaps in their awareness, knowledge and experience that may be bridged, at least in part, by reviewing the relevant content herein. These guidelines should not be viewed as rules to follow blindly, but as a tool to help plan, lead and evaluate adventure activities.

This section of the document is organized into five subsections, including:

- General Considerations for Adventure Pursuits
- Teacher/Teacher/Leader Readiness for Adventure Pursuits
- First Aid Qualifications

- First Aid Kits
- Supervision of Adventure Pursuits

The content in this Manual is progressive from the general content and activities covered in the Level 1 Manual. For example, a teacher/leader taking students on a short cycling tour on local urban park bike paths or swimming at a local public pool should simply refer to the Level 1 Manual. However, if taking students on a technical mountain biking trail or swimming in a context other than where a certified lifeguard is supervising, use this Level 2 Manual. Teachers/leaders involved in outdoor pursuit or aquatics activities should read the relevant parts of this section (determined by reviewing the table of contents) prior to reviewing the relevant activity category and activity-specific pages in *Section 7*.

General Considerations for Higher Care Activities

Organizational Considerations

Approval Process

All higher care activities must be approved by a board-designated official according to board policy and procedures. In many cases this will involve submission of a proposed trip to the principal or designate in the school, but in some cases, where the trip involves extended wilderness travel or out-of-province travel, district level approvals may need to be sought.

Activity/Trip Proposal Considerations

The Lead Teacher or designate will be responsible for providing the approval body(ies) with sufficient information in order for them to sanction it and serve as back-up support. This includes:

- **group** involved (e.g., grade/age, numbers of boys and girls);
- purpose, objectives and curricular/co-curricular/extracurricular relevance;
- dates and times for the activity;
- destination(s)/route;
- itinerary including activities to be undertaken, especially those of higher care nature;
- information for parents/guardians and consent/acknowledgement of risk forms;
- notification if a pre-trip parent/guardian meeting is to be held;
- students' health/medical information to be secured;
- special needs issues of relevance, if any;
- **financial arrangements** (estimated cost/source(s) as relevant);
- need for additional insurance, if relevant;
- transportation arrangements, if relevant;
- **supervision** arrangements (number and gender of staff/volunteers/others);
- plan to brief supervisors/volunteers re: trip plan and roles/responsibilities;
- accommodation arrangements, if relevant;
- teacher/leader/service provider competencies relevant to activities and environment(s);
- safety plan (i.e., procedures for managing the key inherent risks of the activities, environments and participants);

- **emergency response plan** to deal with injured/ill/lost or stranded participant(s);
- confirmation of the presence of contingency plan (alternative plans);
- contact phone number at/near destination;
- Lead Teacher or other key contact and phone number;
- documents to be carried and those to be kept in office; and
- other relevant information unique to the particular trip.

Setting Appropriate Objectives

Activity/trip objectives should consider aspects related to specific personal (i.e., skills, fitness, perseverance), interpersonal and/or environmental or other learning and experience versus "trail or river bagging"; i.e., finishing the proposed route. While everyone will want to complete the journey, sometimes a well-judged decision to turn back helps students experience an example of appropriate decision-making and learn to distinguish this from failure. Just because the trip was completed last year, does not mean it has to be this year. Just because a route was perceived "safe" last year, does not mean it is necessarily so this year.

The best teachers/leaders plan their programs to keep students exploring and expanding along their individual "learning edges". They accomplish this while providing constructive challenge (i.e., avoiding over-controlling, boring situations as well as those fraught with recklessness).

Information Given Parents/Guardians

Information should include, but not be limited to, that outlined in the Level 1 Manual. Where a trip involves an overnight or longer outing, a **parent/guardian information meeting** should be considered so the activity/trip objectives, logistics and safety and emergency plans can be discussed in more detail. In communications with parents/guardians, assume that they do not understand outdoor education/recreation concepts and terminology.

Parents'/Guardians' Responsibilities

As active partners in the process, parents/guardians should be informed that they are responsible for:

- reviewing information provided and calling the school contact if they do not receive an
 adequate description of the outing;
- participating in the pre-trip parent/guardian information meeting if one is held, or otherwise securing the information presented in the meeting;
- **providing informed consent**, or withholding it if they are not satisfied the outing will be reasonably safe for their child/ward;
- **helping prepare their child/ward** with respect to personal clothing and equipment, safety mindset, attitude and behavioral expectations; and
- **supporting their child/ward's learning** in a manner that contributes to his or her future safe involvement in educational/recreational activities and environments.

Informed Consent Versus Waivers

Parents/guardians of minors are typically asked to review a description of the program/activity and its known inherent risks and to choose whether to allow their child/ward to participate. This is called providing **informed consent** and is an important precursor to exposing children or youth to higher care activities and environments. Provide descriptions with reasonable lead time so parents/guardians and students can ask questions or do their own due diligence in securing understanding of the risks before consenting to participate.

Waivers or releases are contracts intended to remove or eliminate the benefit of a right to seek compensation through the courts in the event of injury. They are used to endeavor to put the burden of an accident/incident on the participant or on another person such as the participant's parent(s)/guardian(s), sometimes even where there may have been negligence by the party providing the activity, its staff, volunteers or contractors (e.g., form includes wording such as, "I relieve the organization of responsibility even if it is negligent." Examples of waivers are quite common in recreation: adult skiers, boaters and climbers are all accustomed to being asked to sign waiver forms before they are provided with their lift ticket, boat rental, access to climbing wall, etc. It is a common misconception that such waivers are "not worth the paper they are written on." Courts have upheld these contracts when they have been signed by and for adult participants and are clear and voluntarily entered into.

While written waivers are used in the adult recreation context, there are **problems with** waivers in the youth education or recreation context. Canadian law does not support contracts signed by or for minors (under age 19 in BC) that are prejudicial to their legal rights. This includes all waivers/releases and indemnity clauses (e.g., where the parent/guardian agrees to compensate the provider for any damages, legal costs, expenses, etc. that provider has to pay out due to the minor's injury).

Waivers presented to minors or their parents/guardians on their behalf may reflect an effort to minimize insurance claims by endeavouring to convince injured participants and their families that they cannot seek compensation from the organization, even when the injury was caused or contributed to by their negligence. These forms also ask parents/guardians to declare that they have a power in Canadian law that they simply do not have; they cannot sign away their child/ward's rights. There are many benefits to youth participating in education, recreation, sport and travel experiences, there are often not a lot of options (e.g., other organizations offering the same or similar activities), and many parents/guardians feel compelled to sign any form presented them by the school or organization.

In a desire to support ethical contracting, most school boards and many of the major youth-serving organizations in Canada, prohibit any minors, their parents/guardians, staff or volunteers from signing any waivers, releases, or indemnity clauses as part of offering programs or activities for the minors, including those offered by service providers (e.g., a ski resort, climbing wall venue, rafting operator). These school boards and groups, rely on clarifying roles, rights and responsibilities with service providers in contract, and having parents/guardians, adult participants and volunteers acknowledge awareness of inherent risks (not including provider negligence). Consult board policy or discuss the forms used by the organization with the principal or designate. The teacher/leader must follow organization procedures and should work to ensure all contracting involved is legal and ethical in nature.

In BC, for some higher care (usually extracurricular) activities, a few school districts have approved use of a very limited waiver form that does not attempt to remove the right of the student to sue for compensation for their injuries where these are caused by negligence, but removes the parent/guardians' rights to receive compensation for damages that they may suffer as a result of their child/ward's injuries (e.g., loss of income because they have had to stay home to care for the child). This limited waiver is used in an effort to share the risk between the parents/guardians and the school in higher care situations. School boards are not legally required to use these forms; consult board policy.

Volunteer Selection and Preparation

When seeking volunteers for higher care activities, provide:

- clear information about **volunteer requirements** (e.g., fitness levels, knowledge, skills and experience requisite to the activity/outing in question);
- information regarding the **inherent risks** of the activity (particularly higher care activities), and secure each volunteer's consent to be exposed to these. This helps ensure volunteers are aware of and accept the inherent risks associated with the activity, that they consent to the mode of transportation (if relevant) and to the school securing emergency medical assistance if needed, and that important medical and health related information is at hand in the event it is needed.
- briefing and training regarding their roles and responsibilities (e.g., discussion of the
 objectives, logistics, duties, assignments, student groupings, safety plan and emergency
 plan) and post-activity debriefing.

Service Providers

If selecting a facility or **third party service provider** for outdoor pursuits or other applications (e.g., retreats, special events), select a camp/centre **accredited** by the BC Camping Association, or one that has been suitably inspected and approved by district or school. If not accredited, ask for **proof of insurance** and **Workers' Compensation**. Secure evidence and/or interview the service provider re: the following:

- the **program(s) offered** (e.g., content, process, itinerary, locations);
- **staff selection criteria and training**, qualification, certification (if appropriate), experience relevant to the group and the area/route, and staff evaluation;
- **child protection procedures** (including criminal records screening) if any service provider staff, trainee or volunteer is likely to have considerable access to a minor participant;
- inclusion policies and provisions (if relevant, for students with special needs);
- ability to produce a policies and procedures manual and/or answer questions regarding
 details of the safety plan, clothing and equipment list, location use permits, transportation
 of students, licenses, administration of medications to students, emergency plan, incident
 reporting, debriefing process and other relevant documents;
- the **types and levels of service** provided (program, debriefing, facilities, food services, equipment, materials, staff support, licenses and permits);

- safety record of the service provider (e.g., how many injuries/illnesses that required evaluation/ transport home of a participant over the last year) and safety management review process; and
- references (e.g., other comparable groups served, especially repeat customers).

Subsequent to selecting a provider, secure copies of the safety plan and emergency response plan and work with the service provider to clarify other specifics including:

- student preparation requirements;
- knowledge and skill level required of students;
- knowledge and skill level required of the school's accompanying teachers/leaders;
- the roles, communication lines and expectations of teachers/leaders, supervisors, and site staff (e.g., who will handle behavioral and discipline problems and how);
- whether in-service training is available for the school's staff/volunteers attending;
- costs/fees for students and leaders/supervisors;
- booking and confirmation process;
- directions and arrival location;
- provision of a safety orientation for all students and teachers/leaders (e.g., the site/facilities, safety procedures, rendezvous points); and
- other relevant **program/process** information.

Use of Professional Guides

In some circumstances, school groups may wish to (or be required to) contract a special type of service provider, a guide, to accompany it on a wilderness trip. For example, Parks Canada has instituted regulations related to custodial groups traveling in avalanche terrain in the four mountain parks in winter that includes a requirement to use professional, certified and approved guides in some contexts (see General Considerations for Winter Travel in Section 7).

When employing a guide, it should be recognized that the **guide is hired for specific route-finding and technical knowledge** (i.e., moving the groups safely from Point A to Point B). The guide complements, but does not replace the Lead Teacher, who retains responsibility for and authority over the group.

In **selecting a guide**, secure evidence and/or interview candidate guides regarding:

- WCB coverage;
- insurance coverage;
- certifications and qualifications;
- **experience** (guiding and/or personal) on the route/in the area in question;
- first aid (outdoor/wilderness relevant training) and CPR certification;
- child protection checks (e.g., criminal records check);
- safety record in guiding; and
- **references** (especially from other schools or youth-serving organizations).

Clarify roles, rights and responsibilities, preferably in writing. Work with the guide to select an appropriate **route** for the group. Identify which, if any, **equipment** the guide provides and

seek assurance this equipment meets government regulations and industry standards, as relevant. In addition, discuss or review **documentation** that clarifies or confirms the items noted above.

Transportation

All transportation should be conducted in accordance with the boards' Transportation Policy, the sponsoring organization authority's insurance policy, and the Transportation recommendations in Section 4 Special Considerations.

Site Investigation

The Lead Teacher or designate should assess the site for appropriateness and hazards. This site investigation is conducted to identify the conditions, potential routes, rules and regulations, safety and emergency procedures, and educational/recreational possibilities of the area. Factors guiding the investigation should include:

- the students' abilities;
- teacher/leader's knowledge of the area;
- · difficulty of the terrain; and,
- environmental conditions(recognizing that conditions may vary during the trip).

It is highly preferable for a member of the leadership team to **inspect the site/route** prior to conducting the activity. This helps ensure familiarity with travel conditions and times, hazards, wildlife, accesses and egresses, and other factors that could affect the group. Teachers/leaders should select areas/routes because of their suitability for the group, versus a personal desire to explore. If the area/route has significant risks, consider whether there is a safer and/or less remote location available. **Ask, "Do we really need to go there to achieve our objectives?"**

Where a site or route is deemed desirable, but reconnaissance cannot be done, other means of site/route evaluation may include consulting current maps and guidebooks, Internet searches of route descriptions and reviews and/or seeking input from others who are familiar with the area. Visitor information services should be accessed when visiting a park or protected area (e.g., checking websites, phoning, checking in upon arrival) to ensure that the available information is current. If hunting season is open, assess risk to the group.

Shakedown Outings

One or more short 'shakedown' trips are recommended before taking a group on a long, demanding route (e.g., a daytrip, then an overnight, before a week-long trip). Shakedowns help the teacher/leader calculate appropriate distance, time and pace for a longer expedition, and help all group members develop the fitness, skills and attitudes for more extended travel, check their clothing and equipment suitability, and other aspects of travel.

Area Regulations

Respect the laws, rules and regulations of the area in pre-trip planning and as encountered enroute (e.g., warning signs and flags). For example, Parks Canada often limits group size (10-12 people) on trips into national parks and protected areas. Obtain camping permits, fire permits, fishing and other licenses and area use permission where required (for public or private land). Ensure the group leaves any gates as found.

Local Authorities

Carry the contact numbers for local authorities (e.g., parks office, police, ambulance) and leave these numbers with the Home Contact Person from the school in case the group is overdue. It can be a good idea to notify local area authorities, such as park officials about the proposed activity and location or route, particularly if an extended trip in a remote area is involved. If registering a group for a trip, make sure to inform that office immediately upon finishing the route – unnecessary searches are potentially dangerous to search and rescue personnel and volunteers and expensive (not to mention embarrassing).

Emergency Protocols

Establish protocols to manage anticipatable emergencies (e.g., lost persons, ill/injured/stranded participants, fire). All staff, volunteers and service providers should be briefed regarding the emergency response plan. In the event of an emergency involving higher care activities/environments, the emergency plan should include:

- emergency services contact numbers (e.g., 911 locally or RCMP or local police, forestry
 office, Parks Canada office, provincial park office and/or Emergency Medical Services) and
 locations of nearest services (e.g., hospitals, medical centres);
- evacuation procedure alternatives (for an injured/ill individual, subgroup or the entire group);
- keep a vehicle accessible for emergency purposes (e.g., left at the trailhead or river access/egress, with the keys in a place known by all of the teachers/leaders);
- procedures for preserving evidence, and conducting documentation and reporting; and
- communications priorities and procedures.

In a remote setting, it may take hours or even days for emergency personnel to arrive (e.g., bad weather). The leadership team must have the capacity to manage the crisis in the interim. Where students are taken into a more remote/wilderness setting, **wilderness first aid capacity** is required.

For wilderness-based outings, at least one teacher/leader should be familiar with protocols regarding how to secure helicopter or other appropriate motorized evacuation. If helicopter

evacuation of an injured or ill group member is possible, at least one teacher/leader should be familiar with safety precautions related to helicopters including communications, site preparation, casualty preparation, and safety in the area of the helicopter.

For additional information and support, see:

- Missing Person Procedures in this section;
- First Aid Qualifications for Higher Care Activities in this section;
- Sample List of First Aid Courses for Higher Care Activities Appendix A;
- First Aid Kits Sample First Aid Kit Lists for Higher Care Activities in Appendix B;
- Casualty Report Form in Appendix C;
- Evacuation in the Adventure Leadership Resource

Safety Education

Grade/age-appropriate safety education must be an integral aspect of the activity. For example, inform participants of trip arrangements and plan preparations, and have them participate in these processes, as appropriate. Brief them on emergency procedures and what to do if "lost and alone". Identify safety-related learning outcomes and processes and assessment strategies, if and as appropriate. Notify parents/guardians of this objective so they may provide home support. See the Self-reliance in the Outdoors Resource for lessons and games to help teach safety education.

Navigation/Communication

Staying Found

Learn the route (e.g., with map, guidebooks, photos/slides/DVDs of other's travels there). Visualize the terrain and route. Orient the map while at the trailhead and note key landmarks. Look back often along the trail as it may look quite different.

Maps/Charts

A reasonably current map or chart (if on the ocean) of the type and scale appropriate to the trip, terrain and duration should be used for planning and leading the trip. Check the date and expect changes; the older the map/chart, the more changes there are likely to be.

Other Navigational Aids

Other navigational aids may include Global Positioning System (GPS), altimeters (for high alpine travel), radar and sonar (for ocean travel), etc.. For any device to be used for navigation, the leader(s) must be competent in its use. Be aware that GPS and other electronic positioning systems do not always operate reliably in all regions or terrain. Map and compass skills are still essential for wilderness travel.

Map/Chart and/or Route/Itinerary Card Filed

A copy of the map (with route highlighted) and/or a route or itinerary card (same thing) should be left with the school and made available to parents/guardians. A route or itinerary card should include:

- the route to be followed (identifiable, locations and map/chart grid references),
- significant elevation changes,
- anticipated hazards,
- anticipated travel times,
- · program activities, and
- alternate routes.

External Communications

Trip leaders must research, select, have available and know how to use an appropriate means of external communication (to contact the school or a local authority) where appropriate.

Technologies commonly available include telephones (where accessible) and cellular phones. However, a wide variety of other technologies may be available, and in some cases necessary to consider due to the unavailability of telephones and absence or unreliability of cellular phone range. These include items such as personal locator beacons (PLBs), PLBs with GPS, satellite phones or satellite messengers, and various two-way radio services. New technologies are constantly being developed. Renting is also an option with some (e.g., satellite phones).

Each technology has its advantages and limitations (e.g., range, versatility, ease of use, accessibility, weight, intrusiveness on the wilderness experience, purchase cost and operational cost). For most outdoor group travel, one of the best technologies appears to be a Personal Locator Beacon equipped with GPS. A PLB is relatively versatile, inexpensive and lightweight and provides minimal intrusion into the experience unless it is needed. At that time, it can become a lifesaver. The added onboard GPS receiver permits the beacon to transmit its exact coordinates, so facilitates more rapid and accurate response. Some of the newer models also provide nonemergency satellite messaging capabilities.

The other technology groups that want or need two-way communication capacity should consider is a satellite messenger (e.g., SPOT Satellite GPS Messenger). These units allow a few levels of communication (e.g., non-emergency "I'm OK", "Help" messages to request assistance without activating EMS, and "911" emergency distress messages). The SPOT Connect version allows transmission of short messages composed on compatible smart phones.

Learn how to use any unfamiliar technology, download maps before departure, and if possible, test the selected device(s) during a site pre-visit or ask area managers about any issues with your proposed technology on the route. In addition to range or line-of-sight issues, technologic devices are not always reliable (e.g., they break down, lose power, suffer weather and temperature interruptions, get lost or damaged). If in a remote area, bring an extra set of batteries for the device (in a watertight container) or a solar charger and have one or more back-up means of signaling for help (e.g., flares, smoke flares, brightly coloured rescue fabric, mirrors).

Establish communications protocols for overnight or longer trips, including check-ins (e.g., daily), if and as appropriate. Content of a check-in may include current location, condition of the group, weather conditions, planned changes to itinerary/route, any incidents of note, and next check-in time. See Communications Technologies in the Adventure Leadership Resource.

Noisemakers

All group members should all carry whistles for most activities. Students should be taught a simple whistle-based communication system appropriate to the particular activity and how to summon help if they need to. Ensure they are aware of the consequences for false alarms. If a set of school whistles is used, they should be washed after each trip. On some open water trips, a compressed air horn is also an effective sound-signaling device.

Equipment/Supplies/Clothing

School-owned Equipment

If school or district-owned technical equipment is used (e.g., climbing ropes, helmets), a written record of dates of purchase, maintenance and replacement should be kept. Ensure the purchaser of such equipment understands the program's requirements when selecting the gear.

Equipment Check

Plan for and secure sufficient group equipment. Check its operation prior to departure, correcting any deficiencies that might affect safety.

First Aid, Survival and Repair Kits

Plan and carry appropriate contingency kits, considering the activity, environment, group and trip location and duration. Check kits after trips and restock as necessary.

Clothing Lists/Instructions

Provide parents/guardians and students with a list of recommended clothing and personal items for the activity, environment, season and duration. For overnight/extended trips, teach the ways heat is lost from the body (conduction, convection, radiation and evaporation), what key layers should be worn (ventilation, insulation, protection) and types of clothing and materials for each category. Promote self-care in thermoregulation (e.g., have students think about where they are in relation to where they can next get warm).

Student Clothing/Gear Check

For an overnight or extended trip, check the adequacy of participants' clothing and personal equipment (quantity and quality) several days before departure so that deficiencies may be corrected. Have participants write down items they need to add or replace and keep a copy or jot down a list of who needs what. It is acceptable to use qualified resource people in the community to help inspect the students' equipment (e.g., staff of a local bike shop checking students' bikes).

Failure of Equipment

The consequences of equipment failure can range from an inconvenience to a disaster. All groups should ensure that equipment is in working order, that they carry a sufficient repair kit, and that someone in the group is able to assess the functioning of the equipment used, and carry out basic common maintenance and repair of essential items if/as needed.

Waterproofing Gear

Participants should be encouraged to waterproof their clothing and personal items by employing reusable waterproof bags, packs or jugs, or by double bagging these items in separately tied plastic bags and placing them in abrasion-resistant duffels or packs. Group gear to be kept dry should be treated similarly.

Raingear/Tarps

For all spring, summer or fall outings of day trip or longer duration, everyone should have rain gear, including good quality tops and bottoms or a poncho. A rain jacket is the minimum protection against wet weather. Consider bringing a group tarp(s) along in case of an unexpected heavy shower. Always bear in mind the potential for hypothermia in the province's changeable climate.

Shelters

Consider types of shelter appropriate for the age group, season, environment, duration and program objectives (e.g., a cabin, a hostel or wall tent with an airtight stove is generally more appropriate than small tents for a group of under 12s on a winter trip).

Lights

For all day trips or outings of longer duration, students should be asked to bring a functioning flashlight or headlamp. This is essential for overnight or extended trips and also important for winter day trips into more remote areas where darkness comes early.

Injury/Sickness Prevention

Safety Systems

Implement primary safety measures and be prepared to apply secondary and tertiary measures as necessary.

- Primary measures include the hazard-related safety procedures, information, and warnings given to the participants and the skills they are taught to manage the hazard.
- **Secondary** measures are those enacted if the primary ones fail. These contingencies are very important, as student learning new skills can make errors that have serious consequences if not backed up; e.g.,; bringing along a tarp in the event of heavy rain.
- **Tertiary** measures are emergency procedures applied when primary and secondary systems fail and an incident occurs; e.g., organizing a search for a missing student, applying first aid.

The "Rule of B4s"

The Rule of B4s emphasizes the need to think ahead so one will always be ready. Practice it and teach it as appropriate. For example:

- Check out the weather forecast B4 heading out.
- Tell a responsible adult where you're going and when you'll be back B4 you leave.
- While on the trail or walk, drink B4 you get thirsty and eat B4 you get hungry.

- Remove a layer of clothes **B4** you're hot and sweaty; put a layer on **B4** you get chilled. Find or put on protection from foul weather **B4** it hits.
- Turn around **B4** you have no margin for safely getting back in the daylight.
- Make camp B4 you are too tired.
- •By constantly thinking **B4**, you will remain safer and more comfortable. Great game for the students is to have each come up with one B4 related to the trip.

Physical Injury Prevention

Physical activities have inherent risks. However the likelihood of injury can be reduced by instructing students in what to expect in the specific activity and environment. **Attitude** plays a large part in likelihood of injury. Students need to be made aware that the more remote the activity is, the more difficult and dangerous it is to evacuate an injured person, therefore far greater care should be taken while engaging in activities; e.g., mountain biking more conservatively in the backcountry than one might while on a local trail.

High Energy Sources

High energy sources contribute to many outdoor incidents and the teacher/leader should plan accordingly. High energy sources include:

- Height falls (e.g., when hiking or climbing) or objects falling from above,
- **Speed** e.g., vehicles, wheeled activities, snowsports,
- Unexpected weather changes e.g., storms, wind, cold (hypothermia risk),
- Water, especially moving water e.g., hypothermia, drowning, pinnings, and
- Fire or other heat sources burns and scalds, typically in camp.

Cold Injury

Hypothermia is a potential killer in any season. Instruct students, in agrade/age-appropriate manner, in the prevention, recognition and treatment of hypothermia for outdoor travel. For winter travel, frostbite and other potential cold related injuries should also be discussed.

Heat Illness

Instruct students, in a grade/age-appropriate manner, in the prevention, recognition and treatment of hyperthermia (heat exhaustion and heat stroke) for activities and trips in hot weather.

Potable Water

Adequate and safe water, or a means of procuring it, must be assured. Dehydration can be a problem in summer or winter that can greatly reduce an individual's capacity and can contribute to cold or heat illness/injury. If sufficient drinking water cannot be carried, make arrangements for boiling or treating water (e.g., filtering, chemical treatments). If boiling, water must be kept at a rolling boil for at least a minute, longer at higher elevations. If relying on a pump over an extended trip, have a back-up (e.g., chemicals, boiling) in the event of mechanical failure. Generally, school groups on extended trips can provide for their water needs by boiling in the evening and morning and filtering or using chemical treatments during

the day as needed. See Water Treatment in the Adventure Leadership Resource.

Medical Screening

Where an excursion is of particularly high care nature (e.g., extended time in a remote environment and/or with significant physical and/or weather-related demands) it is advisable to require a medical screening by a physician prior to the trip departure date (or evidence of a thorough physical within the past two years). Where requiring a medical, provide a written outline of the program, level of physical exertion, etc. so the doctor can consider the student's involvement in the trip context.

Medical Conditions

Consider any known pre-existing medical conditions of group members and medications taken in relation to the demands of the activity, time to EMS, etc. and discuss the potential impact of any conditions identified with parents/guardians. Be aware that problems may develop from:

- overexertion or other traumatic injury incidents (heart condition, asthma, diabetes);
- falls (muscular problems, arthritis);
- prolonged activity time (diabetes).

Teachers/leaders and students need to be aware of the potential for creating a hazardous situation for a student, and avoid triggers that may aggravate the condition.

Cooking/Hygiene

Develop and enforce a clear process and related rules for camp kitchens; e.g., boundaries, camp stoves or fires, handling hot liquids and foods. Establish processes for hygiene and sterilizing dishes, utensils and water bottles daily. Use soap and water or hand sanitizer at bathroom and kitchen sites to reduce bacterial spread.

Hazardous Materials

At least one leader must be aware of the hazards related to any hazardous materials used (e.g., camp fuel, bear spray, phosphorous flares) and establish a plan for the storage, transportation and use of these materials. Group members must receive appropriate training in the use of any hazardous materials before using it, particularly in an out trip context.

Nourishment

Bring adequate nourishment for day trips or longer outings. The amount of food required will depend on the activity, duration, terrain and environment, time of year and potential weather conditions. If backcountry traveling, students should have nutritious lunch and snack foods that do not require cooking or significant preparation. For overnight or longer trips, determine the number of meals needed and quantities to meet caloric and nutritional needs and pack along some extra food in case of delays en route. Also consider allergies and dietary restrictions.

Insect Protection

For all but winter activities, inform parents/guardians and students of the likely presence of

mosquitoes and/or other biting/stinging insects and/or ticks. Advise them to bring adequate protective clothing (e.g., light colored, loose-fitting, covering arms and legs) and shoes or boots (not sandals). Bug hats (with head/neck netting) or jackets may be encouraged for overnight trips out of the urban environment during bug season.

Insect repellent may be used on exposed skin. Those containing DEET are most effective, but also harshest on children's skin. Apply as per manufacturer instructions, avoiding spraying on the face (spray on hands and dab on face, ears and neck) or on any cuts, abrasions or irritated skin. If putting on sunscreen as well, put it on first and let it soak in well before putting on repellent. Wash hands after application of repellent; avoid touching lips and eyes before doing so.

Water Safety

Programming on the water presents a unique set of concerns that must be considered in planning. Few people (staff, volunteers or students) spend significant time in or on the water and most are somewhat alienated from this environment. It is not uncommon to misjudge the hazards of an aquatic environment and it can be more difficult to safeguard students or effect rescues. Drowning has been the most common mechanism of death in outdoor pursuits fatalities. However, BC has a long history of safely run, water-based educational/recreational programs that have greatly contributed to the water-safety related learning of children and youth.

Hypothermia is a concern with extended immersion in any cold body of water. Consider the type of water body for other related hazards; e.g.:

- Lakes size and potential for wind, waves, murky water, drop-offs if wading,
- Rivers and Creeks fast water, flooding/high water, slippery footing if walking across, rapids, foot entrapments, dams/weirs, logiams and sweepers,
- Oceans tides, currents, wind, waves, ocean vessels.

Water-craft Regulations and Standards

It is the duty of every owner/operator of a watercraft to understand and comply with the *Canada Shipping Act* and its associated regulations and standards. It is prudent to ensure that the owner/operator of any vessel(s) used for a program comply with all the regulations for that craft. Refer to Transport Canada, Office of Boating Safety (www.boatingsafety.gc.ca).

Aquatic Safety

If a higher care aquatic environment is involved (e.g., open water, moving water) an effort should be made to identify students' abilities and comfort levels in the water. This may be accomplished by inquiring about the student's level of swimming attained (e.g., Red Cross, YMCA) and/or by using the Lifesaving Society Canadian Swim to Survive Standard. The test may be administered in a swimming pool or at a controlled waterfront and includes: roll into deep water, tread water for 1 minute, and swim 50m using any swimming method, without goggles. Any students (or supervisors) who cannot meet the criteria must wear a personal floatation device (PFD) or lifejacket when in chest deep or deeper water.

All students must wear PFDs when on open water (e.g., boating). Because students will be

wearing PFDs for all water-based outdoor pursuits (except some swimming activities – see Aquatics in Section 7), it is not essential to have a certified Lifeguard present, but at least one member of the supervision team must have relevant rescue/lifesaving skills. Prevention must be emphasized (e.g., site assessment, clear rules, buddy system, sufficient supervision).

Time of Day

Injuries can happen at any time of day. However, there is some evidence that more outdoor recreation incidents occur in the afternoon (particularly in the second half of the afternoon). Factors such as fatigue, dehydration, rushing to finish a route, and other group factors may be involved. Remain vigilant and encourage students to stay focused.

Altitude

Some people are more sensitive to the low atmospheric pressures encountered at altitude and may suffer symptoms of high altitude sickness. The first symptoms include headaches, lightheadedness, or nausea. Generally this will occur at over 2500 meters (8000 feet), but be aware of what elevation the group members have come from e.g.; a person who arrives in the Rockies from sea level and immediately begins activity may begin to experience these and other symptoms at significantly lower altitudes. Retreating to lower elevations or approaching higher elevations over the course of a few days to allow for acclimation usually helps.

Exposure to Heights

Vertigo, which is a sensation of dizziness or imbalance can be debilitating to a participant when exposed to heights. Otherwise confident and capable individuals may be immobilized with fear or demonstrate poor judgment. Judge capabilities of a group carefully (e.g., ask about experience, do a shakedown trip) before committing to exposed routes.

Group/Trip Management

Leadership with and of People

Almost every major outdoor education/recreation incident that has occurred was caused or compounded by failures in leadership, teamwork and/or communication. Act to:

- build trust and effective problem solving;
- set and clarify group goals, roles and responsibilities and decision points;
- use available information and weigh options;
- distribute workloads equitably (utilizing strengths and talents in the group);
- be here and now; prepare and be aware;
- communicate clearly and concisely;
- model and encourage appropriate assertiveness;
- keep people informed and involved in decisions, as appropriate;
- recognize and deal with stress, fatigue, dehydration, etc. that may affect decision making;
- accept that some conflict is inevitable deal with it.

Teacher/Leader Presence

A teacher/leader must accompany students to and from the facility/area and remain on-site regardless of whether that adult has any direct instruction/leadership responsibilities with the students.

Briefings

At the trailhead/put in, just prior to heading off, do a quick briefing of:

- the route, destination, and itinerary (e.g., breaks, lunch, turn-around time);
- hazards and route-finding challenges anticipated and related safety precautions (briefly; these can be gone into more detail as they become relevant);
- environmental considerations en-route;
- pace, lead/sweep system (see below), and buddy system;
- who is carrying the first aid kit, repair kit, survival kit, and communications devices;
- when the first break will be held (generally a good idea within 10-15 minutes) so people can remove a layer or adjust packs, boots, etc.; and
- summary and opportunity for questions to clarify understandings.

Pace

The activity should proceed at a pace that accommodates all group members, considering their age, fitness and skill. Set appropriate goals, planning conservatively. The larger the group, the slower the pace. Support group members being well-rested, well-hydrated and well-fed so they can keep going. Use a buddy system, but keep those prone to straggling relatively near the front. Have each person responsible for keeping the person behind him or her in sight or sound, so no large gaps develop. Have a set turn-around time, with contingency built in over the second half when people are tired. With a large group that has adequate numbers of supervisors and contingency kits on a very clear route, it may be appropriate to split the group into two groups, meeting at a set destination.

Managing inherent risks en route such as poor weather, poor footing or visibility, downed trees, un-bridged creek crossings or other natural or group-based hazards, and other factors could affect timing and pace significantly.

Lead/Sweep Positions

Know the whereabouts of the students. When the group is self-propelled (e.g., hiking, canoeing), youth are prone to getting spread out due to varying fitness levels, skills or objectives. When appropriate (e.g., high inherent risk, unknown route), staff or mature, experienced participants must be in the lead (front) and sweep (last) positions and other participants must be directed to stay between these two positions. Lead and sweep positions may be rotated among suitable group members. Additional /teachers/leaders can "float" along the line as desired. An adult should be present at the site of any specific significant hazard to be negotiated.

Rest Stops

On a trail or paddling route, appropriately spaced stops are necessary to provide time for rest,

clothing adjustments, and water/food intake. Check how students are doing, visually, and verbally. Try to ensure the entire group has sufficient time to rest before any individuals begin on the next leg.

Diminished Conditions

It is rare that all circumstances of a trip are optimal. Where one or more undesirable circumstances impact the group's potential safety, (e.g., very poor weather, major group fatigue, illness), additional precautions should be taken, and a contingency plan should be in place or the group stopped until one can be developed.

Contingency Plans

Contingency (alternative) plans/routes should be developed in the event that environmental or group circumstances become untenable (e.g., a major weather/terrain change, vehicle/major equipment failure, an exceptionally disruptive participant). Notify the school (e.g., principal, Home Contact Person), if possible and appropriate, whenever an alternative plan is enacted. A fan-out phone system (phone tree), email, text message, or other expedient means of communicating changes to parents/guardians may be used, as necessary. If communication to the organization is likely to be impossible, unreliable or undesirable, parents/guardians and students need to be notified of this fact before the trip.

Spontaneous Changes to Itinerary

Often, opportunities emerge over the course of a program or outing that are attractive deviations from the approved itinerary (e.g., a nearby peak beckons to be climbed, the lake by camp looks very inviting for a swim after a hot hike). Unfortunately, unplanned, spontaneous opportunities have resulted in several severe injuries. STOP and THINK through the benefits, but also the key elements of the safety (e.g., equipment, supervision, instruction) and emergency response plans that need to be in place to manage known risks. If it can't be done safely, it's a no go.

Unprogrammed Time

The time periods when group members are in base camp, enjoying free time or spontaneous games/activities can contribute to incidents, potentially contributed to by distraction, lack of appreciation of risk, horseplay, etc. Continue active supervision.

Wildlife

Where particular wildlife species endemic to the area present hazards (e.g., bears, cougars, elk), a plan for avoiding encounters should be developed and for minimizing potential harm in the event of an encounter. Contact local authorities (e.g., parks office) regarding seasonal wildlife concerns and closures. Posted wildlife warnings should be respected as closures, and alternative trails/sites should be selected. Alter route if grizzly bear activity is detected (e.g., cubs, carcass). Teachers/leaders must carry bear spray and/or bangers when in known bear habitat (bangers carried unloaded and spray carried with the safety catch on, but immediately accessible). Instruct students regarding how to manage an encounter with wildlife. See Wildlife in the Adventure Leadership Resource.

Environmental Impact

The group must be conscious of its environmental impact and work to minimize it for the sake of the environment, their own health and safety, and that of future area users. For example:

Travel and Camp

- learn a bit about the ecology of the area and share this with students so they care about and for the area,
- limit group size appropriately,
- use established, durable routes and sites (e.g., minimal vegetation), and try to avoid traveling during known muddy seasons,
- stay on trails to avoid creating multiple trails,
- respect wildlife; give animals their space and do not feed them,
- control pets or leave them at home,
- leave what you find (e.g., rocks, plants, feathers, fossils, shells), and
- use support vehicles or animals (e.g., horses) appropriately and only on permitted routes.

Food and Cooking

- plan appropriate quantity of food to minimize leftovers,
- pick low odor foods and cosmetics (e.g., unscented deodorant or none),
- · avoid wiping food residue on clothes,
- use minimal packaging,
- use stoves rather than fires for cooking, where appropriate,
- be aware of and respect any temporary or permanent fire bans;
- take care in making any fires (select established fire site if possible, keep fire small) and extinguishing fires (burn all wood to ash if possible, douse till cold to touch),
- animal-proof (e.g., hang) food, toiletries, etc. overnight well away from the sleeping and cooking areas.

Hygiene

- dispose of human waste appropriately or carry it out, and with a large group (e.g., 10
 people or more) try to select camp areas with toilet facilities, bring a portable toilet or
 build a latrine,
- take out all garbage, including paper products such as toilet paper, sanitary products, etc., except where this material can be discreetly and completely buried (in a latrine or individual 'cathole') or burned in a hot fire; do not burn plastics or other toxic materials,
- take care when washing people, dishes, clothing (use minimal soap and wash well away from waterways).

Local Culture

Be conscious of local cultures (e.g., visits to local first nations peoples' sites; during international travel), honor local rules, customs and mores, and do not disturb any physical property or historic artifacts.

Visual/Audio Impact

Recognizing that a group of youth is often more intrusive than other parties in an area, the group should minimize its visual and audio impact. Also, consider restricting use of earphones as they may interfere with students hearing instructions and experiencing the environment fully.

Psychological Considerations

People Assessment and Management

Understand individual and group responses to anticipated activity and environmental stresses, consider the capacities and propensities of the students and lead them appropriately. For example:

- be aware of the normal **stages of group development** (forming, storming, norming and performing) and the impact the current stage the group is in may have on their:
 - effectiveness in problem solving;
 - achievement of objectives; and
 - physical, psychological and social safety;
- actively build and contribute to a team environment; set a tone that is serious, but light at
 the same time;
- role model intelligent risk-taking and discuss relevant decision-making processes and actions with participants;
- be as concerned about group members who excessively underplay risk as those immobilized by it;
- **try to ensure instructions are getting through** to participants on both ends of the spectrums;
- remind participants that they are responsible for their own safety;
- expect students to act somewhat recklessly at times (sometimes even defiantly); be prepared to restrict access to a higher care program or activity to those willing and able to follow direction, and enforce rules with appropriate consequences; and
- monitor students' performance and behaviour in relation to objectives. Use this
 information to adapt the existing program or make changes for future offerings to support
 safety and success.

Briefings/Debriefings

Develop an integrated system of trip briefings and debriefings for administrators, teachers/leaders, relevant service providers, volunteers, and students. The group should be appropriately debriefed following the experience, or after a serious incident, in accordance with the program's goals and process. Debriefing should be age-appropriate and encourage critical thinking about the activity/trip to support safe future involvement.

Real (Objective) vs. Perceived (Subjective) Risk

Virtually all participants involved in outdoor pursuits/aquatics activities face some real risk of physical, psychological or social harm. Teachers/leaders attempt to minimize exposure of students to these objective risks to a level comparable with everyday living. They often do this

while encouraging personal growth and learning through manipulation of **perceived risk**; the participants' subjective beliefs and feelings about the risk involved in an activity. For example, the canoe trip leader who tells the group, "We're coming up on Widow Maker Rapid" gets the participants' attention because the rapid sounds "dangerous", even if it is not and they experience a sense of mastery after paddling through unscathed. Conversely, a leader may play down an unavoidable real risk the group is confronted with, in order to minimize the potential for members' excessive anxiety to affect their ability to follow directions. The use of perceived risk is a skill and requires teacher/leader judgement.

Disclosure

The program goals and the capacity of the students determine the level of disclosure. Students should be briefed regarding potential hazards unless:

- there is an appropriate reason not to do so;
- students are known to possess the knowledge base necessary to deal with these unannounced situations;
- students and their parents/guardians are informed they are not being instructed in all the specifics of the activity; and
- students accept it is in their best interests not to be informed.

Simulations

If conducting search and rescue, survival, first aid or evacuation simulations, all supervisors and students should be informed beforehand and notified again at the beginning of each simulation. This may reduce realism somewhat, but it helps prevent excessive anxiety and possibly false alarms to emergency services.

Natural Consequences

Natural consequences are those that occur without outside intervention. Self-directed participation in activities exposes youth to appropriate natural consequences for their decisions and actions. For example, if a student ignores the rain and fails to don raingear, the natural consequence is becoming wet and cold. An artificial consequence would occur if a teacher/leader intervened, telling the group they could not continue until everyone was wearing their raingear. Conscious choices must be made on an individual basis about when to allow natural consequences and when to intervene for safety concerns.

Challenge by Choice

Students and their parents/guardians have a right to self-determination where the students' health and safety are involved. Students should be informed, at agrade/age-appropriate level, about their rights, responsibilities, risks and consequences, and supported in their decision-making. They should have the opportunity, wherever this can be done safely, to opt out of activities they are uncomfortable trying and for the group to support members in their choices. The teacher/leader should take care to avoid tying success to performance of tasks that may be psychologically and/or physically unsafe for a student.

Early Exit Incidents

While some early exits may be caused by injury or illness, and dealt with accordingly, in the higher care program or activity, there is also the possibility that one or more participants may decide they want to go home before the program/activity is complete. Because this situation creates challenges for the leadership team and group, it is important that a teacher/leader attempt to discuss with the individual the reasons for leaving. Try to problem solve with the student (e.g., is there a way to resolve whatever concern is driving the desire to exit early), encourage the student to stay, and outline the consequences (for him/her and the group) of leaving. If appropriate, the leader may encourage the member to discuss the situation with the group.

Ultimately, if the student is still adamant he or she wants to go home, an early exit plan must be developed, considering factors such as time of day, distance and terrain to egress, weather, condition of the participant, pickup logistics (who, where, when, how). A supervisor must be designated to accompany the student out to an appropriate pick up point or make other appropriate arrangements. The parent(s)/guardian(s) and Home Contact Person or other school contact designated must be called to ensure ongoing supervision upon return home. The remaining students must be supervised and should be given the opportunity to debrief the incident.

AWOL Student

An absent-without-leave (AWOL) situation occurs when a student intentionally and without consent leaves the program, without the intention of returning. This is a concern when it happens in a local activity, but of even more serious concern when it occurs in a more remote setting.

- Discuss physical boundaries around camp with the group and time parameters (e.g., the
 length of time a person may be absent from the group before being declared missing or
 AWOL). Also discuss the potential impacts and consequences of one or more people
 taking off on the group (e.g., potential for the participant running away to get lost or hurt,
 potential for others in the group or other search and rescue people to get lost or hurt
 looking for them, interruption of the group's activity or trip until the missing person is
 found).
- Have a process in place where a student can share concerns and seek resolution to help avoid situations where the individual may see running away as their only option.
- Treat any student who talks seriously about leaving the group and any student who has
 gone missing after making such declarations to be at high risk of becoming injured or lost
 while being AWOL, or of hurting themselves and potentially others.
- When contacting police or search and rescue authority, note belief the missing person(s) may have gone AWOL. Also call the Home Contact Person (who may contact remaining students' parents/guardians to apprise them of the general situation and assure them that their child/ward is okay, while withholding the name of the missing student)) and/or principal or designate (who will also contact the missing student's parent(s)/guardian(s) to inform them that their child is missing and believed AWOL).

- If located, the AWOL student may be given the option of rejoining the group (temporarily or until safe exit can be arranged), or being supervised by a teacher/leader until transferred to another responsible adult.
- Debrief AWOL situations with the leadership team and group.
- See Lost Person procedures in the Adventure Leadership Resource.

Group Effort

Conduct activities in a manner focused on transcending, rather than compensating for, any individual's lack of ability. Select approaches that allow all members to participate equally (e.g., having studennts carry an amount of the group's gear proportional to their relative size and fitness).

Emotional Relationships in Group

Where adolescent youth participate on overnight or longer outings, leaders need to be aware of the potential for emotional relationships to arise within the group (or to come already established), and the potential problems that can arise related to these relationships (e.g., exclusivity in sharing time and work, leaving the group). It is important to manage these situations with great sensitivity. Because these types of relationships can negatively affect the dynamics of the group, including attention to safety, youth should be encouraged to put the group first; to avoid acting on feelings of attraction to another group member until back home, or to put an established personal relationship on temporary hold over the trip. Setting objectives related to personal and group skill development can help youth focus on why they are there.

Re-entry

Teachers/leaders, parents/guardians and students should be made aware that returning to organizational and home situations following extended expeditions or travel may prove challenging for some students who have grown accustomed to the group living context. Time, understanding and support are usually all that is required.

Teacher/Teacher/Leader Readiness for Adventure Pursuits

The competent, confident teacher or leader providing outdoor pursuits experiences for students must be able to do so safely. This requires a combination of organization, personal characteristics, technical knowledge and skills, and judgement. Below are some aspects of readiness or competency that are relevant to instructing or leading in the outdoor pursuit and/or remote area context.

Organizational and Personal Philosophy

The teacher/leader must be aware of and understand the goals and philosophy of the school and operate consistent with the wording, spirit and intent of board policy. Mature teachers/leaders will also have their own strong personal ethic, and philosophical foundations for the programs and activities they lead. They will know where they are coming from (what they've learned), where they want to help the students go (what they want to help them learn or experience), and most importantly, why (big picture societal goals).

Health and Fitness

Theteacher/ leader involved in taking students into semi-remote to remote environments should have sufficient health and fitness to manage the demands of the activity with relative ease. An annual physical is encouraged.

Qualification

The WCB defines the "qualified" worker as one who is knowledgeable about the work, aware of the hazards involved, and able to use their education, training and experience to control the hazards (or exposure to the hazards). Training helps the teacher/leader develop technical, instructional and some group management skills. Safety related judgement is most soundly based on enlightened experience (including purposeful reflection). Such experience evolves over time, inevitably through some trial and error.

Judgement is the glue that binds all other components of leadership together. Judgement is the ability to make good decisions in situations involving incomplete information. Experienced teachers/leaders process information in the field more effectively (accurately) and efficiently (quickly) than inexperienced leaders and this contributes to better decision making in complex situations. Operating in open, dynamic environments with groups of students who are learning and practicing new skills requires very good judgement capacities.

Personal Characteristics

In addition to good judgement, the capable teacher/leader has a set of personal characteristics that are common to people leading in dynamic circumstances. These include:

- integrity commensurate with their role as an informed and responsible professional;
- self-awareness (understands how their own strengths and limitations impact the situation);
- openness and accountability (able to hear others input or feedback without becoming defensive);
- tolerance for adversity and uncertainty and able to remain realistic, but calm and confident;
- persistent and possessing inner strength and stamina;
- strong oral **communication skills** (i.e., can accurately and effectively share information and instructions and confirm their receipt);
- skilled motivator, able to exercise creativity to inspire others to action in the desired direction;
- strong people assessment and management understandings and skills; and
- empathetic and compassionate; not ego-centered.

Area Familiarity

At least one teacher/leader must be familiar with the area or type of terrain where activities are to be conducted and be able to adapt to changing conditions (e.g., high water on a canoe route). More than one source of information should be used (e.g., pre-visit, maps, guidebooks, local area officials, websites, other area users).

Weather

Weather is a contributing factor in many outdoor incidents. On an overnight or longer trip, a member of the leadership team should be reasonably skilled in observing basic weather indicators (e.g., clouds, precipitation, wind speed and direction, temperature) and predicting the short-term (e.g., 3 hour) local weather. Know why and how to modify plans in the event of a serious weather event.

Body Temperature Control

Teachers/leaders must be able to maintain their own personal microclimate for comfort and safety. They should know the common causes and mechanisms of cold and heat illnesses/injuries, their avoidance, recognition and treatment.

Navigation

The trip leader or guide and another supervisor must be skilled and effective at navigating in the area(s) used. This may include map selection and reading, compass use (with or without map) and route selection and interpretation (e.g., time estimates, hazard identification). If a GPS is to be used, a leader must be competent in its use in conjunction with an appropriate map.

Technical Skills

The teacher/leader must have adequate technical skills related to the mode of travel (e.g., backpacking, canoeing, skiing) and living (e.g., remote area camping) employed to participate safely and provide a model for the students at or above the level they are expected to achieve. The leader need not be an expert, but should be sufficiently proficient to provide reasonable visual demonstrations and explanations to support instruction of the participants.

Aquatics

Any teacher/leader who may be required to enter deep water as part of an activity should be able to achieve the Lifesaving Society Canadian Swim to Survive Standard while wearing a PFD. This standard includes: roll into deep water, tread water for 1 minute, and swim 50m using any swimming method, without goggles. If a teacher/leader is personally unsure they can meet the standard, the test can be administered at any local pool or controlled waterfront. Beyond this minimum in-water competency, leaders will need to be able to swim well enough to meet any other requirements of the activity.

People Assessment and Management Skills

Many if not most outdoor pursuit related incidents are caused or exacerbated by poor group cohesion and/or management. It is important for the teacher/leader to have the knowledge, skills and experience to understand individual and group responses to anticipated activity and environmental stresses, consider the capacities and propensities of the students, and lead them appropriately.

Environmental Skills

The leadership team must have a strong minimal impact ethic and at least one person with a strong awareness of the group's environmental impact and the skills to minimize these impacts.

Survival

The leadership team needs to be capable of surviving the worst reasonably anticipatable conditions. In more remote environments, this includes knowledge and skills related to:

- maintaining a survival attitude;
- problems solving and decision making;
- fire lighting;
- shelter building;
- signaling;
- securing safe drinking water; and
- teaching the above skills to their students, as appropriate, to ensure group survival.

Emergency Procedures

The leadership team must have the capacity to handle anticipatable emergencies at an appropriate level. Knowledge and skills needed may include:

- organizing a general emergency response protocol;
- implementing specific emergency plans;
- effecting simple rescues involving the activity;
- searching (locally) for a missing group member(s);
- rescuing a stranded group member;
- providing first aid and cardiopulmonary resuscitation;
- child protection controls and response;
- violence prevention and response;
- emotional crisis management;
- communications;
- evacuation or sending for help;
- managing a serious injury or fatality; and
- basic incident debriefing.

Teacher/Leader Capacity

The teacher/trip leader must have a level of readiness (i.e., knowledge, skill, health, fitness and experience) required for leading the activity. The individual should conduct an honest self-assessment of his or her experience and abilities in relation to the anticipated demands of the proposed trip. The principal or designate approving the trip must be convinced that the teacher/leader's competence and experience are sufficient. See Teacher/Teacher/Leader Readiness for Higher Care Activities in Appendix D.

Certification and Recertification

Most teachers/leaders involved in providing school or youth recreation activities, including outdoor pursuits, do not hold any current certifications (beyond their first aid/CPR tickets, and even there, many are not currently certified in first aid/CPR). For many activities, a certification course (offered by a sport/recreation governing body) may provide a valuable means of increasing instruction/leadership capacity. In some high care activities and

environments, such as scuba diving, instructor certification is an absolute prerequisite to teach/lead anyone In the activity. Certification courses provide one way in which administrators and teachers/leaders can be confident that some identified level of competence has been attained. However, most certification courses have significant limitations in teaching and assessing judgment, personal and interpersonal skills, and other soft skills that can greatly affect group safety. Also, they generally involve only adult-peer instruction and leadership scenarios, as opposed to working with less predictable youth in the activity and environment.

An inexperienced teacher/leader with a certification is not necessarily safer or more qualified than an experienced individual who lacks a certification or whose certification has lapsed. Certifications generally require maintenance of membership in the certifying organization and periodic refreshers or recertification. Teachers/leaders who instruct or lead trips involving remote environments or outdoor pursuits carry the extra load associated with securing and maintaining these certifications. District and school administrators should support teachers/leaders in attaining or remaining certified in areas that affect programming safety, where such certification is deemed essential or beneficial. Check with the principal or designate if questions of certification and/or qualification arise.

Vehicle Operation

One or more teachers/leaders may be required to drive board or school-owned or rental vehicles as part of their job description. See Transportation in Section 4 for license requirements and other related information.

Documentation of Outdoor Leadership Capacity

Whether a teacher/leader involved in delivering outdoor pursuits holds any formal certificates or not, it is advisable for them to keep a record of related education, training, personal and leadership experience in the environments and activities of interest. This record may be housed in a logbook or file and may include items such as:

- Lists and/or course outlines/agendas of formal education and training (e.g., university or college courses, certification courses, non-credit courses, professional development workshops, in-house training).
- Trip logs (chronicling personal and leadership experiences in the field, and including logistics to support future similar trips, and reflective observations and evaluations, as appropriate);
- Course evaluations, testimonials, cards/letters from students, peer assessments, etc., if and as appropriate; and
- Other materials that help reflect the depth and breadth of qualifications of the teacher/leader.

Filling Gaps in Teacher/Teacher/Leader Readiness

The board or school must be prepared to recruit appropriate volunteers or hire a service provider or independent professional instructor or guide, (considering feasibility) to augment a teacher/leader's capacities when his or her expertise for an activity or trip is insufficient. In such cases it may be possible for the teacher/leader to secure in-service training by co-leading

or assisting to support future leadership of the activity.

First Aid Qualifications

The Lead Teacher or designated first aider on the leadership team must understand injury and illness prevention related to the activity, environment and group, and be capable of managing a foreseeable injury or illness to minimize negative long-term consequences to the casualty(ies). The most important criterion to consider in determining how much training is enough is the time and distance from first responders (e.g., paramedics to arrive on-site, time to transport to hospital). The following levels of training are suggested minimums:

Local, Low Risk Activities and Environments

Low-risk on or off-site activities/events occurring less than twenty (20) minutes from emergency medical services arrival at the casualty's side should have at least one person accessible within five minutes with at least basic emergency first aid understandings and skills.

- These understandings and skills include basic scene management, cardiopulmonary resuscitation (CPR), treatment of choking, control of external bleeding, treatment of shock, and use of universal precautions.
- Skills result from formal training (e.g., Emergency First Aid certification course: generally a minimum 6.5 hours training) or equivalent (e.g., in-house training).

Moderate Risk and/or Semi-remote Environments

Where the inherent risk of the activity (e.g., involves speed, fire), environment (e.g., heights, water bodies) and/or students (e.g., known pre-existing medical conditions) is more significant, and/or the location is more than twenty (20) minutes from emergency medical services arrival at casualty's side but less than one hour, at least one person should be accessible within five minutes with a standard first aid level of training or equivalent preparation.

- Skills result from formal training (e.g., Standard First Aid certification course; generally minimum 13 hours of training) or equivalent.
- Level A Cardiopulmonary Resuscitation (CPR) is the recommended minimum; Level B if students are under eight (8) years of age, as these courses address child CPR and child obstructed airway management.
- In addition to the understandings and skills listed above for emergency first aid, training and preparation here should include secondary assessments; bone, joint and muscle injuries; head, spinal and pelvic injuries; wound care; thermal injuries (heat/cold); and medical conditions (diabetes, seizures, asthmatic emergencies and allergic reactions).

Higher Care Activities/Remote Environments

Where external communications are non-existent or unreliable, or where EMS arrival at casualty's side will likely take more than one hour (e.g., significant time and distance to get to a location for transfer to EMS), the group should include at least one person who has substantial **emergency response training (> 35 hours including prerequisites), including a**

remote/wilderness-specific first aid course or equivalent preparation of 20 hours or greater duration. Wilderness first aid is unique in its emphasis on dealing with emergency situations using the first aid equipment and supplies the group is likely to have at its disposal versus depending on oxygen tanks and other items not likely to be present.

- There should be one such person with each subgroup if the group is to be split. Basic search and rescue skills are also important. Teachers/leaders and administrators are encouraged to select first aid course providers or design in-house courses based on an honest, realistic risk assessment, considering the activity, environment and participants and time to EMS support. Restrict adventure activities and trips with students to activities and areas for which the first aid capacity in the group is adequate.
- A health care professional may serve as a first aider for local, low risk activities and moderate risk activities and/or semi-remote environments (if CPR trained). For remote environments, the first aider must have appropriate first aid training, as described above.
- It is **not essential that a leader be the primary first aid provider** of the group. Trained/certified people may be found from within the school and/or community (e.g., a student's parent/guardian, search and rescue volunteer), en route (e.g., bus driver) or at a site being visited (e.g., a ski resort or camp). When seeking the services of a camp, outdoor centre or other service provider, ask about the first aid capacity of the staff, ensuring it is consistent with the guidelines described above at a minimum.

Note: Time in a recertification course does not count in determining training/preparation time; only the initial time for the course/training/preparation is considered. Teachers/leaders are expected to work to remain current in their first aid and CPR related knowledge and skills.

For additional information and support, see:

- Sample List of First Aid Courses for Higher Care Activities in Appendix A;
- Sample First Aid Kits for Higher Care Activities in Appendix B;
- Casualty Report Form in Appendix C;
- Universal Precautions in Appendix D in the Level 1 Manual;
- Handling Disposal of Dangerous Items in Appendix E in the Level 1 Manual;

First Aid Kits

- A fully stocked first aid kit must be accessible.
- The first aid kit must be restocked after any use.

First Aid Kit Contents

The kit contents suggested are based on several sources, including:

- Occupational Health and Safety kit lists;
- analysis of items leaders and service providers currently carry on trips with youth;
- reviews of kit lists from organizations that instruct outdoor/wilderness first aid courses;
- content lists from pre-packaged first aid kits sold for outdoor/wilderness applications; and
- other first aid and outdoor literature.

Item Selection

The priority set for developing these lists was the smallest, least expensive kits possible while ensuring carriage of the essentials for managing most anticipatable injuries/illnesses. The key factor to use in deciding what to carry is time/distance from Emergency Medical Services arrival on scene or transport of a casualty to a medical facility. Three progressive contexts were identified: local, semi-remote, and remote, coinciding with the level of first aid training that should be present on the outing. Other considerations in selecting kit components include:

- group size,
- trip purpose,
- · trip length,
- environment,
- season,
- · pre-existing conditions/illnesses of participants, and
- first aid training/qualifications in the group.

Quantities of items were based on assuming 20 people for a three-day period; modify accordingly.

Medications

It is generally advisable to select areas and routes (e.g., within 12 hours of medical aid) such that there will be minimal chance of needing to administer medications to students (other than as pre-arranged). In the event of any complications caused by a medication, questions may arise regarding:

- what would have happened if the drug had not been given,
- what other options may have been available (e.g., evacuation), and
- was the individual who made the decision to administer the drug qualified to decide.

Try to carry the least number/range of drugs while still managing risks. In urgent circumstances, a teacher/leader or first aid provider may administer medications (e.g., for fever, cough suppression). If possible, prior to administering the medication, contact the parent/guardian, tell them about the indications for the drug, what the drug is (type and brand name; e.g., cough medicine - Benylin) and dose, and ask for consent. The administration of the medicine should be documented (date, time, who administered it, to whom, and what meds were given (type, dose). Keep a list of drugs carried in the first aid kit.

Special caution is extended concerning the inclusion of drugs (non-prescription and prescription). Teachers/leaders and/or designated first aiders should not overextend their training and certification. Wilderness or other advanced first aid training is highly recommended before assuming this role over extended, remote area travel. For semi-remote and remote trips, consider whether to include, and if so, the most appropriate medications for anticipatable injuries and illnesses (e.g., bacterial infections, pain/inflammation, allergies/flus/colds, diarrhea, etc.).

For truly remote trips, research the need to potentially carry other more specialized drugs

(e.g., local anesthetics; skin applications; drugs for eyes, ears, nose or throat; oral rehydration drugs) and the conditions under which they may be purchased and administered.

- Carefully review the dosage, indications (i.e., what it is for), contra-indications (i.e., who should not take it), and potential adverse reactions and treatments to these, of all drugs carried.
- Consider the effects that heat, cold, UV, altitude, or physical and/or emotional stress may
 have on using the medication. For example, some medications, such as antihistamines
 (including some over-the-counter sleeping pills that contain antihistamines), can affect
 one's sensitivity to heat, interfere with the body's cooling functions, affect water and salt
 retention, or increase skin sensitivity to UV rays.
- Consider the potential interactions of drugs taken.
- Take what may foreseeably be needed, but don't bring anything no one is trained or qualified to administer.
- Do bring telecommunications technology to summon external help if needed and to try to secure parental/guardian consent to administer a medication to a student.
- Prior to the trip go through the emergency plan with parents/guardians and explain what situations the group has the capacity to manage and ensure they understand the potential complicating factor remoteness introduces.

Packaging

Ensure all drugs carried are in labeled containers, including the instructions for use and storage (e.g., temperature regulation, protection from UV) and warnings. Ensure the entire first aid kit is packaged in a watertight container.

En route

Everyone in the group should know where the kit is located. Students should not be permitted unsupervised access to the kit; make them come to a supervisor. For trips into semi-remote and remote environments, students should be encouraged or required to carry some of their own basic items (e.g., bandaides, blister prevention/treatment).

Supervision of Outdoor Pursuits

There is no precise method for determining the exact number of supervisors required for any adventure pursuits activity. It depends upon many situational factors. The assignment of arbitrary numbers of supervisors can lead to unnecessary exposure to physical and/or legal risks. The following table provides a tool to help leaders and managers consider relevant factors.

For a given outing, assign each factor a 0, 1, or 2 based on its potential impact on the trip. A **Low Risk** (0) item is one that does not pose a risk on the trip. A **Moderate Risk** (1) item is one that may present some risk, but is not a serious handicap in and of itself. A **Higher Risk** (2) item requires conscious ongoing assessment and management. The total score is derived by adding up the scores of all 25 factors (maximum 50 points).

Qualifications and Clarifications Re: Supervision Ratios

- The accuracy of the calculation depends on an honest, competent appraisal of the factors
 on the table. The table is merely a tool to use in considering supervisory needs. If the
 number calculated seems insufficient for the circumstances, add one or more supervisors.
- The calculation should help a principal or Lead Teacher determine an adequate ratio. Even if an error is made, a court may look favorably toward someone who took the time to think out the leadership ratio.
- Some activities include risks that mandate more supervisors (e.g., rock climbing, Scuba diving); appropriate ratios will be presented in the activity-specific pages (Section 7).
- In a remote area, if a group splits into two or more traveling groups each group must have a teacher/leader or approved adult supervisor.
- The leadership/supervisory team may include one or more teachers, leaders, service providers (e.g., paid guides), volunteers (e.g., parents/guardians or others).
- Assistant leaders and supervisors should be at least 16 years of age and at least two years
 older than the students they are to supervise. Younger leaders-in-training may accompany
 the group, but should not be counted in the formal supervision ratio.
- Where adolescents are used to help supervise a program, their involvement should be
 voluntarily undertaken (they may be paid), and pre-approved by the principal or
 designate. Their role should not include sole responsibility for individual students or
 groups of students, except where they have been well-trained to accept this responsibility
 and/or in an emergency.
- Consider the readiness/capacity of the supervisors for the outing in question, whether
 these are additional staff or volunteers. In some instances, under-prepared or undertrained supervisors, while contributing positively to a good supervisory ratio, may be more
 of a liability than an asset.
- The mere presence of more supervisors does not ensure student safety. Sometimes the groups with the most supervisors suffer the most, as the supervisors feel unneeded and end up socializing among themselves. Have meaningful roles and keep supervisors focused on their duties.

Note: The table on the next page is a tool, not a precision measurement device. Use judgement and adapt as appropriate to the context at hand.

Supervision Ratio Calculation Tool

	Factors to Assess	Low Risk	0 points	Moderate Risk	1 point	Higher Risk	2 points	Comments
Mandate	Educational/recr'l value of the activity	High value		Some value		Limited value		
	Support of activity by parents/guardians	High support		Moderate support		Low support		
Leadership Factors	Leader relevant knowledge	Very knowledgeable		Adequate knowledge		Limited knowledge		
	Leader relevant health and fitness	Very healthy/fit		Adequate health/fitness		Limited health/fitness		
Facto	Leader relevant specific skills	Very skilled		Adequate skills		Limited skills		
rs	Leader relevant experience	>20 days/last 3 yrs.		5-19 days in last 3 yrs.		<5 days/last 3 yrs.		
	Capability of assistant leaders/chaperones	Very capable		Adequate capability		Limited capability		
Stude	Student age	13+		9-12		5-8		
Student Factors	Student relevant knowledge	Very knowledgeable		Adequate knowledge		Limited knowledge		
ctors	Student relevant health and fitness	Very healthy/fit		Adequate health/fitness		Limited health/fitness		
	Student relevant specific skill	Very skilled		Adequate skills		Limited skills		
	Student relevant experience	>20 days/last 3 yrs.		5-19 days in last 3 yrs.		<5 days/last 3 yrs.		
	Student clothing/footwear adequacy	Good quantity/quality		Adequate quantity/quality		Limit'd quant./qual.		
	Student behavioral propensities	Mature		Adequate maturity		Immature		
	Presence of special needs students	None		1 special needs student		More than 1		

	Factors to Assess	Low Risk	0 points	Moderate Risk	1 point	Higher Risk	2 points	Comments
Trip/Activity	Group equipment adequacy	Good quant./qual.		Adequate quantity/quality		Limited quantity/quality		
	Emergency/first aid capacity (kit & skill)	Good quant./qual		Adequate quantity/quality		Limited quantity/quality		
ty Specific	Nature of the activity(ies)	Low inherent risk		Some inherent risk		Significant inherent risk		
cific Fa	Nature of the environment	Low inherent risk		Some inherent risk		Significant inherent risk		
Factors	Familiarity with site/area & similar areas	Very familiar		Some familiarity		Low familiarity		
	Duration of the outing	Day trip		Overnight		>2 days and 2 nights		
	Season (assuming region in BC)	SeptOct./May-June		Nov., MarApril		DecFeb.		
	Anticipated weather	Mild/seasonal		Some concern		Cold/wet/stormy		
	External Communications Capacity	Immediate/reliable		Some concern(s)		Poor or unreliable		
	Time/distance from EMS arrival	< 20 mins.		20 mins. – 2 hrs.		>2 hours		
				Subtotal				
			•			Moderate + High		
					Overall Risk Rating			

Assuming there are no more than three higher risk
factors and none of the higher risk factors are extreme
(e.g., severe weather, several immature and/or
aggressive participants), the table to the right can be
used as a general guideline to help determine
teacher/leader to student ratios. See notes following
for qualifications.

	Total Points	Overall Trip Risk Rating	Suggested Minimum Ratio*				
e	< 10	Low Risk	Age 5-8 (1:6) Age 9-12 (1:10) Age 13+ (1:15)				
	11-20	Moderate Risk	Age 5-8 (1:5) Age 9-12 (1:8) Age 13+ (1:10)				
	21-30	Higher Care	Age 5-8 (Excessive risk) Age 9-12 (1:6) Age 13+ (1:8)				
	>30	Excessive for a school program	Reduce risk factors or cancel				

Levels of Supervision

Generally, supervision of outdoor pursuits will be subject to the categories of supervision described in the *General Consideration for Off-Site Activities* section; i.e., constant visual, onsite, in-the-area supervision. One of the overall objectives of outdoor pursuits is to develop students' knowledge, skills and attitudes so they can engage in these activities independently as part of a healthy, active lifestyle. Where mature students have been well-prepared, there may be opportunities for them to work in small groups or alone, without direct supervision. Before reducing supervision, be satisfied that all students involved have the requisite competence and are adequately dressed and equipped to handle contingencies and that their parent(s)/guardian(s) have been informed about this aspect of the program and consented to their child/ward participating.

Suggested process:

- withdraw direct supervision gradually; e.g.,
 - accompany the group,
 - shadow the group,
 - check in often at agreed locations, and
 - check occasionally at agreed locations.
- ensure the group has unmistakable natural or human-developed boundaries (e.g., roads, fencelines) to contain the participants, that all areas are accessible by leaders, and that the area is clear of any hazards students are not competent and equipped to deal with;
- ensure that the students carry a reliable means of external emergency communication;
 and
- have students carry their personal health cards (or a photocopy).

Additional Resources

See the Additional Resources and References file for additional websites, publications and office references to assist with the implementation of these safety guidelines. See the Glossary in the Level 1 Safety First! Manual.