

YouthSafe Outdoors



Safety First! Guidelines for Higher Care Youth Programs

Level 2 Manual



A Resource for the
Alberta Community Voluntary Sector



Youth**Safe**Outdoors
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- Edson – Town of Edson Recreation, Arts and Culture
- Red Deer – Central Information Referral Society
- Edmonton – City of Edmonton Community Services
- Calgary – Cardel Place (Nose Creek Sports and Recreation Association)
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My apologies to anyone I have missed. I assume responsibility for any typos, spelling or grammatical errors. I hope you find the resource useful and supportive of your efforts to help children and youth enjoy healthy, active lifestyles and learn to be safe and self-reliant.

Glenda Hanna, Ph.D.
Author, YouthSafe Outdoors

About the Author

Glenda Hanna, Ph.D., M.A., B.P.E., Principal of Quest Research and Consulting Inc., is the creator and principal investigator of YouthSafe Outdoors. Glenda has been actively researching, writing, teaching and speaking about risk management and legal liability in off-site and outdoor pursuits activities for 28 years. She is the author of several books and over 125 articles and reports on the topic and has been sought after as a speaker on the subject at scores of provincial, national and international conferences.

Glenda is recognized internationally for her ability to effectively and accurately articulate the industry and community standard of care for outdoor education and recreation programs. She has served as an expert witness in numerous legal cases involving school boards and camps and has provided risk management consulting and auditing services to several organizations.

In addition to her strong commitment to “coming from research” in developing YouthSafe resources, Glenda has a huge professional and personal experiential base from which to draw on. She was a professor of Outdoor and Environmental Leadership at the University of Alberta for ten years, where she taught and mentored many of today’s leaders in the field. She has worked as a municipal recreation program supervisor, and the Youth Program Director of a YMCA. She’s also been a camp counselor, wilderness guide, trip leader, outdoor pursuits instructor (more than 20 different activity pursuits), outdoor pursuits instructor trainer and certification course examiner, and the Technical Director and Master Course Conductor of a sport/recreation certification body (the Canadian Association of Nordic Ski Instructors).

Glenda’s research and writing work is supported by her partner, **Mike Hanna, B.A. (Rec. Admin.), MA/ABS**. Mike is the Principal of Synergy Canada Inc., the company that provides all operational management services for YouthSafe Outdoors and related projects.

Mike and Glenda share strong public service backgrounds, and hold professional and personal missions to encourage and support healthful, active outdoor living in their community, province and country. They volunteer in local clubs, in their community league and school and have year-round personal and family involvement in outdoor recreation.

Glenda has traveled extensively on land, water and snow. She’s done numerous three-week to month-long expeditions: e.g., cross country skiing from Jasper to Banff, sea kayaking the Queen Charlotte Islands, canoeing the Coppermine River to the Arctic Ocean, backpacking the Wilmore Wilderness Area. She is an avid cross country skier and six-time winner of the Canadian Birkebeiner Cross Country Ski Race (55 km carrying a 5.5 kg pack).

Glenda is the recipient of the Global Woman of Vision Award for her work in creating and authoring YouthSafe Outdoors. This award celebrates women whose personal dedication and actions toward realizing their dreams improves life in the community and serves to inspire others.



Disclaimer

This document (*Safety First! Guidelines for Higher Care Youth Programs*) is a reference guide that articulates recommended safety practices related to leading youth activity experiences, outdoor pursuits/aquatics, and travel excursions. It has been developed to assist youth-serving organizations and offices in Alberta to create or revise relevant policy and procedures and clubs/local units and service providers to formulate site-specific guidelines and practices to help reduce the potential for injury during youth programs. This document is not intended to be policy in and of itself. The contents herein need to be considered in light of the unique safety concerns of individual instructional/leadership situations. The sound, informed judgement of staff, volunteers and service providers remains the most crucial tool to apply in advancing safe recreational experiences for youth.

While every reasonable effort has been made to provide accurate and useful information, neither the accuracy nor completeness of the material is guaranteed, and, therefore, the author, editors, and sponsoring partners will not be liable to any person or organization for any loss or damage of any nature which may be occasioned as a result of use of this guide and any related materials.

This document notes a number of leadership training and/or certification governing bodies in Canada and Alberta. This does not constitute an endorsement. The user assumes all responsibility for determining whether to take additional training, and if so, from which provider.

Permitted Uses

Only licensed organizations and licensed government offices in the province of Alberta may use this resource to support youth recreation experiences. All others, whether involved in a not-for-profit or a for-profit endeavor, must secure written permission from the author to use this resource.

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- Provide the activity-specific page(s) of direct relevance to the services to be provided by a specific service provider to that provider for the purposes of clarifying expectations and contracting for the service.

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Section 6. General Considerations for Higher Care Activities

Prior to reviewing this section, 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 Youth Programs and Activities.*
- I have a solid understanding of the material in any relevant subsections in Section 4 Special Considerations.*

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 not necessarily high, 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 youth-serving organization 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 sponsoring organization home base, up to and including extended wilderness travel.

These guidelines are not a substitute for the independent decision-making of experienced, capable leaders. The activities here frequently require that leaders 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
- 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 leader taking youth on a two-hour cycling tour on urban park bikepaths or swimming at a local public pool will not likely be concerned should simply refer to the Level 1 Manual. However, if taking youth on a technical mountain biking trail or swimming in a context other than where a certified lifeguard is supervising, use this Level 2 Manual.

Leaders involved in outdoor pursuit or aquatics activities should read the relevant parts of this section prior to reviewing the activity-specific pages of interest 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 (e.g., Program Manager or designate) according to organization policy. Know and respect this process.

Activity/Trip Proposal Considerations

Leaders should provide the approval body(ies) with sufficient information in order for them to sanction it and serve as back-up support. This includes identifying:

- **group** involved (e.g., age, numbers of boys and girls);
- **purpose**, objectives and program relevance;
- **dates and times** for the activity;
- **destination(s)/route**;
- **itinerary** including activities to be undertaken, especially those of higher care;
- **information for parents/guardians** and consent/acknowledgement of risk forms;
- notification if a **pre-trip parent/guardian meeting** is to be held;
- **participants' 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;
- **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;
- **Activity Leader** 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.

Section 6–2

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 participants 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 leaders plan their programs to keep youth 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 recreation/education 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 organization 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;
- **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 recreational activities/environments.

Informed Consent Versus Waivers

Parents/guardians of minor participants 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 for higher care activities or environments so parents/guardians and participants 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 recreation or education context**. Canadian law does not support contracts signed by or for minors (under age 18 in Alberta) 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 child's injury).

Waivers in the youth recreation context 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 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 children/ward's rights. There are many benefits to youth participating in 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 organization so their children/wards won't be left out.

In a desire to support ethical contracting, several of the major youth-serving organizations in Canada, by national policy, prohibit any participants, parents/guardians, staff or volunteers from signing any waivers, releases, or indemnity clauses as part of offering youth programs, including those offered by service providers (e.g., a ski resort, climbing wall venue, rafting operator). These groups, along with many if not most school districts in western Canada, 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 negligence). Consult organization policy or discuss the forms used by the organization with the Program Manager or designate. **The leader must follow organization procedures and should work to ensure all contracting involved is legal and ethical in nature.**

Section 6-4

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 organization 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, 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 Alberta Camping Association, or one that has been suitably inspected and approved by the organization's authority. 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 participants 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 participants, licenses, administration of medications to participants, 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).

Section 6-5

General Considerations for Higher Care Activities



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:

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

Use of Professional Guides

In some circumstances, organization 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 Activity Leader. The Activity Leader retains responsibility for and authority in the group.

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

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

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.

Section 6-6

Transportation

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

Site Investigation

The Activity Leader or a reliable 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 recreational/educational possibilities of the area. Factors guiding the investigation should include:

- the participants' abilities;
- 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. 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 leader reconnaissance cannot be done, other means of site/route evaluation may include consulting current maps and guidebooks and seeking input from others who are familiar with the area. Visitor information services should be accessed (e.g., by phone, checking websites, checking in upon arrival) when visiting a park or protected area 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 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 en-route (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 sponsoring organization 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 the group's return – 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 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 participants are taken into a more remote/wilderness setting, **wilderness first aid capacity** is required.

For wilderness-based outings, at least one 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 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:

- **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**

Section 6–8

Safety Education

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 **Lost Person Procedure** in the **Adventure Leadership Resource** for additional information regarding searching for a missing group member. 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. 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 sponsoring organization and made available to parents/guardians. An adventure travel 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 sponsoring organization or a local authority) where appropriate and feasible. 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. These include items such as satellite phones, radio phones, VHF/HF radios, palm pilots and/or laptop computers, and personal locator beacons (PLBs) (PLBs are only to be activated in life-threatening situations).

Each technology has its advantages and limitations (e.g., range, ease of use, accessibility, purchase and operational cost). If possible, test the selected device(s) during a site pre-visit or ask area managers about likely coverage. In addition to range 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) 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

Leaders and participants should all carry whistles for most activities. Participants should be taught a simple whistle-based communication system appropriate to the particular activity and how to summon help if they need to. Ensure participants are aware of the consequences for false alarms. If a set of sponsoring organization 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

Sponsoring Organization Equipment

If organization-owned technical equipment is used (e.g., climbing ropes), 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.

Section 6–10

Clothing Lists/Instructions

Provide participants 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 participants think about where they are in relation to where they can next get warm).

Participant 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 participants' or sponsoring organizations' equipment (e.g., staff of a local bike shop checking participants' bikes).

Failure of Equipment

The consequences of equipment failure can range from an inconvenience to a fatality. 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 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, participants 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** safety measures are those enacted if the primary measures fail. These contingencies are very important, as youth 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 lost participant, 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/don 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.

Physical Injury Prevention

Physical activities have inherent risks. However the likelihood of injury can be reduced by instructing participants in what to expect in the specific activity and environment. **Attitude** plays a large part in likelihood of injury. Participants 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., skiing 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 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.

Section 6–12

Cold Injury

Hypothermia is a potential killer in any season. Instruct participants, in an 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 participants, in an 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 pump, 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, sponsoring organization groups on extended trips can provide for their water needs by boiling in the evening and morning and filtering mid-day. 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 participant'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. 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).

Leaders and participants need to be aware of the potential for creating a hazardous situation for a participant, 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. Participants 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, participants 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 participants of the likely presence of mosquitoes and/or other biting/stinging insects and/or ticks. Advise them to bring adequate insect repellent and protective clothing (e.g., light colored, loose-fitting, covering arms and legs). Bug hats (with head/neck netting) or jackets may be encouraged for overnight trips out of the urban environment during bug season.

Water Safety

Programming on the water presents a unique set of concerns that must be considered in planning. Few people (staff, volunteers or youth participants) 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 participants or effect rescues. Drowning has been the most common mechanism of death in outdoor pursuits fatalities. However, Alberta has a long history of safely run, water-based recreational programs that have greatly contributed to the water-safety related learning of 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, logjams 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. Contact Transport Canada, Office of Boating Safety (www.boatingsafety.gc.ca).

Section 6–14

Aquatic Safety

If a higher care aquatic environment is involved (e.g., open water, moving water) an effort should be made to identify participants' abilities and comfort levels in the water. This may be accomplished by inquiring about the participant'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 participants who cannot meet the criteria must wear a personal floatation device when in chest deep or deeper water.

All participants must wear personal floatation devices (PFDs) when on open water (e.g., boating). Because participants 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 participants 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 participants 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 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 recreation/education 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.

Leader Presence

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

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.

Section 6–16

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 participants. 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 leaders can “float” along the line as desired. A leader 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 participants 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 sponsoring organization (e.g., 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 participants 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). 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 participants 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 participants 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.

Section 6–18

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 participants hearing instructions.

Psychological Considerations

People Assessment and Management

Understand individual and group responses to anticipated activity and environmental stresses, consider the capacities and propensities of the youth 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 participants 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 participants' 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, leaders, relevant service providers, volunteers, and participants. 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. Leaders attempt to minimize exposure of youth 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 leader judgement.

Disclosure

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

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

Section 6–20

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 participant ignores the rain and fails to don raingear, the natural consequence is becoming wet and cold. An artificial consequence would occur if a 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

Youth and their parents/guardians have a right to self-determination where the youths' health and safety are involved. Participants should be informed, at an 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 leader should take care to avoid tying success to performance of tasks that may be psychologically and/or physically unsafe for a participant.

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 leader attempt to discuss with the individual the reasons for leaving. Try to problem solve with the individual (e.g., is there a way to resolve whatever concern is driving the desire to exit early), encourage the individual 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 participant still opts 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 participant out to an appropriate pick up point or make other appropriate arrangements. The parent(s)/guardian(s) and Home Contact Person or other organizational contact designated must be contacted to ensure ongoing supervision upon return home. The remaining participants must be supervised and should be given the opportunity to debrief the incident.



AWOL Participant

An absent-without-leave (AWOL) situation occurs when a participant intentionally and without consent leaves the program, without the intention of returning. This is a concern when it happens in a local program, 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 participant can share concerns and seek resolution to help avoid situations where the individual may see running away as their only option.
- Treat any participant who talks seriously about leaving the group and any participant 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.
- Note belief the missing person(s) may have gone AWOL when contacting police or search and rescue authority. Also call the Home Contact Person (who may contact remaining group members' parents/guardians to apprise them of the general situation (while withholding the name of the missing participant) and assure them that their child is okay) and/or Program Manager or designate (who will also contact the missing participant's parent(s)/guardian(s) to inform them that their child is missing and believed AWOL).
- If located, the AWOL participant may be given the option of rejoining the group (temporarily or until safe exit can be arranged), or being supervised by a 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 participants 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

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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

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

Leader Readiness for Adventure Pursuits

The competent, confident instructor or leader providing outdoor pursuits experiences for youth 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 leader must be aware of and understand the goals and philosophy of the organization and operate consistent with the wording, spirit and intent of Board policy. Mature 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 participants go (what they want to help them learn or experience), and most importantly, why (big picture societal goals).

Health and Fitness

The leader involved in taking youth 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 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 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 youth who are learning and practicing new skills requires very good judgement capacities.



Personal Characteristics

In addition to good judgement, the capable 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 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

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 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.

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Technical Skills

The 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 participants 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 leader who may be required to enter deep water as part of an activity or to assist with a rescue 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 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 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 participants, 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 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 participants, 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 participant(s);
- rescuing a stranded participant;
- 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.

Leader Capacity

The Activity 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 Program Manager or designate approving the trip must be convinced that the leader's competence and experience are sufficient. See **Leader Readiness for Higher Care Activities** in **Appendix E**.

Certification and Recertification

Most instructors/leaders involved in providing youth recreation, including outdoor pursuits do not hold any certifications (beyond their first aid/CPR tickets, and even there many are not currently certified). 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 activities, such as scuba diving, it is a requirement to instruct anyone. Certification courses provide one way in which administrators and 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.

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An inexperienced 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. Leaders who instruct or lead trips involving remote environments or outdoor pursuits carry the extra load associated with securing and maintaining these certifications. Boards and organization administrators should support leaders in attaining or remaining certified in areas that affect programming safety, where such certification is deemed essential or beneficial. Check with the Program Manager or designate if questions of certification and/or qualification arise.

Vehicle Operation

One or more leaders may be required to drive organization 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 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 participants, peer assessments, etc., if and as appropriate; and
- Other materials that help reflect the depth and breadth of qualifications of the leader.

Filling Gaps in Leader Readiness

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



First Aid Qualifications

The leader or designated first aider on a 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: minimum 6.5 hours training) or equivalent training and/or preparation (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 participants (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; minimum 13 hours of training) or equivalent training and/or preparation.
- Level A Cardiopulmonary Resuscitation (CPR) is the recommended minimum; Level B if participants 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 (> 40 hours including prerequisites), including a remote/ wilderness-specific first aid course or equivalent preparation of 20 hours or**

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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. 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 youth 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 they have CPR training. 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 organization family and/or community (e.g., a participant'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. Leaders are expected to work to remain current in their first aid and CPR related knowledge and skills.

For additional information and support, see:

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

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 participants (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 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 (e.g., by cellular or satellite phone), 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). 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/flu/colds, diarrhea, etc.).

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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.
- 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 a satellite phone or other telecommunications technology to summon external help if needed and to try to secure parental/guardian consent to administer a medication to a child.
- 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. Participants should not be permitted unsupervised access to the kit; make them come to a supervisor. For trips into semi-remote and remote environments, participants should be encouraged or required to carry some of their own basic items (e.g., bandages, a pressure dressing).

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 Certifications

- 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 leader and/or manager 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 leader or approved adult supervisor.
- The leadership/supervisory team may include one or more leaders, service providers (e.g., paid guides), volunteers (e.g., parents/guardians, past graduates of the program, or others).
- Assistant leaders and supervisors should be at least 16 years of age and at least two years older than the participants 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 Program Manager or designate. Their role should not include sole responsibility for individual participants or groups of participants, 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 under-trained 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 participant safety. Sometimes the groups with the most supervisors suffer the most, as the supervisors feel unneeded and end up socializing among themselves. 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.

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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, on-site, in-the-area supervision. One of the overall objectives of outdoor pursuits is to develop participants' knowledge, skills and attitudes so they can engage in these activities independently as part of a healthy, active lifestyle. Where mature participants 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 participants 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 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 participants are not competent and equipped to deal with;
- ensure that the participants carry a reliable means of external emergency communication; and
- have participants carry their personal health cards.

Additional Resources

See the **Additional Resources and References** file for additional written, website and office references to assist with the implementation of these safety guidelines.

See the **Glossary** in the **Level 1 Safety First! Manual**.

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Section 7. Adventure Pursuits Activities

Adventure pursuits involves specific activities or categories of activities undertaken that have higher levels of inherent risk related to the activity, environment, and/or group than the activities covered in the Level 1 Manual.

The guidelines in this section are designed to serve leaders involved in providing activities that include one or more of the following criteria:

- **Semi-remote to remote location:** out of the community (e.g., provincial park, wilderness river);
- **Lack of clear boundaries for activity:** an area one could get/stay lost in for more than an hour;
- **Long duration:** from a half-day to many days duration;
- **Far from support services:** not close to accessible buildings and/or vehicles (e.g., for warmth, bathrooms, a landline to get help if needed);
- **Not close to emergency services:** more than 20 minutes from EMS arrival on-site;
- **Specific leadership training required:** these activities are of the sort that an instructor or leader should have some specific technical and instruction/leadership training;
- **Significant preparation time of participants:** most participants would require more than an hour and potentially several hours to days to properly prepare to participate.

Planning and leadership of such activities requires consideration of the general parameters of higher care activities (see [Section 6](#)) as well as application of these principles to the specific activity, as covered in the following pages. Leaders are directed to review the relevant content of the previous six sections prior to applying the content on any relevant pages in this section. Every effort has been made to minimize redundancy by placing common content in more general sections. It is the reader's responsibility to work from general to specific guidelines.

The activities have been divided into three major subsections:

- A. Land-Based (Spring/Summer/Fall) Activities
- B. Water-Based Activities (including aquatics)
- C. Winter-Based Activities

These guidelines recognize three different scenarios relevant to the organization of activities:

On-site Instruction: Exposures are typically three hours or less in duration and generally occur at a fixed site (e.g., canoeing at the camp waterfront, climbing on an artificial climbing wall).

Day Trip: Exposures are up to a full day and frequently involve moving from point A to point B or in a loop (e.g., hiking a forested loop in a provincial park, downhill skiing/snowboarding at a large mountain resort).



Overnight/Extended Trip: Includes at least one night out and generally involves travel from Point A to Point B or in a loop. (e.g., a two-day backpacking trip, a weeklong canoe trip).

Within each activity category (e.g., paddlesports, climbing activities) and/or specific activity, the content is further organized into considerations related to five elements:

- Known Potential Risks;
- Leader Readiness;
- Equipment/Location;
- Instruction; and
- Supervision.

NOTE: If, when reviewing the general considerations for adventure pursuits and/or content for the activity and duration of interest, the reader discovers unfamiliar terms and concepts presented, this is a strong indicator that additional personal preparation (e.g., an instructor/leader training course, readings) or contracting a qualified service provider is indicated.

This document is **not** intended as an instructional guide. The leader will need to use other references for this purpose. See **Additional Resources and References**.

TIP: Known Potential Risks items related to an activity(ies) can be copied, pasted and edited for use on trip proposal forms and acknowledgement of risk and consent forms. See the **Procedures and Forms Templates for Youth Programs** for the Word version of these lists.

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A. LAND-BASED (SPRING/SUMMER/FALL ACTIVITIES)



Camping

Local Camping	Age 6+
Residential Camping	Age 6+
Frontcountry/Base Camping	Age 8+
Remote/Extended Camping	Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and V (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Local Camping

Local camping groups may pitch tents out in a leader or participant's backyard, a local park or other local, well-supported site. Such camping may be a big culminating adventure for younger participants (e.g., municipal daycamp) or may be part of a shakedown activity for older youth working up to frontcountry/base or remote camping.

Residential Camping

If staying at a camp or outdoor centre, the service provider generally provides dorm/cabin/ other permanent or semi-permanent accommodations, toilets, showers and kitchen facilities, so the requirements for participants are less than for remote, self-sustained camping. Participants still need to bring personal clothing, toiletries, etc., and meet any specific requirements the school or service provider places on them. Personal sun, insect and rain protection are a minimum for spring, summer or fall camps; sun protection and clothing/ footwear for cold/snow for winter camps. Refer to the Alberta Camping Association for accredited camps.

Frontcountry/Base Camping

Frontcountry camping involves staying in an established public or private campground, typically with vehicle support on-site (e.g., car camping). Facilities often include potable water, toilets, and fire pits or wood burning stoves for cooking.

Base camping involves setting up a temporary or semi-permanent campground, typically without immediate presence of vehicles, from which other activities are run.

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Remote Camping

Remote camping typically involves self-sufficient, lightweight, overnight stays in minimal facility backcountry sites (e.g., tenting). A trip may involve a single night out or many nights.

Extended camping (including any other activity such as backpacking, canoe tripping, ski touring that occurs in conjunction with the camping) refers to engagement in the activity for two or more successive nights. Such outings typically involve travel and camping in the wildland/wilderness (i.e., remote context).

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and/or falls;
- Injuries related to colliding with another person or with a fixed object;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia in cold or wet weather due to insufficient clothing;
- Loss of hand dexterity in cold or wet weather;
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Burns or scalds related to use of fires, camp stoves and/or the handling of hot food or liquid;
- Cuts related to the use of knives, axes or saws;
- Illness related to poor personal hygiene, failure to purify drinking water, or failure to sanitize dishes;
- Injuries related to encounters with animals and plants in the environment;
- Allergic reactions to natural substances in the environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Note: Camping related hazards tend to be subtle and understated when compared to the dramatic confrontation of cliffs or rapids. However, they can be no less significant contributors to injuries or lost participant incidents. People may be arriving in camp after a long day on the trail or water. Fatigue, dehydration, distraction due to socializing rather than focusing on tasks, horseplay precipitated by boredom and/or the sense of euphoria/celebration at being released from burdensome packs, a lack of experience in self-sufficient



living by participants (e.g., food preparation, cooking), and/or a lack of appreciation of the hazards present in and around camp may all contribute to injuries or incidents. Time and attention need to be devoted to encouraging an ethos of safety in and around camp. It may be time to shift gears, but not priorities.

Leader Readiness

- The leader must be competent to organize the camping activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. This includes having sufficient relevant camping experience in recent years for competence and confidence.
- Assistant leaders should have sufficient camping experience and be comfortable outdoors to help support the group.

Equipment/Location

- Collect and check all necessary group, safety, first aid, survival and repair kit equipment before trip, ensuring deficiencies are corrected.
- Have participants bring their backpack, sleeping bag, sleeping pad (e.g., ensolite, thermarest), flashlight/headlamp and clothing as well as any group gear they are providing (e.g., tents, stoves, pot sets, water pumps, axe, saw or shovel) to ensure that they are adequate for the demands of the trip and properly packed.
- Ensure group and personal gear is waterproofed as needed (see **General Considerations for Higher Care Activities**).
- Ensure that all equipment is appropriate and functioning. If applicable, have participants practice setting up tents, fueling and lighting stoves, etc., before departure.
- Water bottles must be clearly distinguishable from fuel bottles.
- Participants should have personal first aid and survival kits.
- No heating or cooking devices (stoves, candles, etc.) may be used in tents or shelters with a floor space of less than four meters square/occupant, except in the case of wood stoves used in wall tents with appropriate stove pipes for smoke removal.
- Carry bear deterrent (e.g., spray, bangers) when in bear country. Know use and limitations.
- Rain gear, including good quality tops and bottoms or at least ponchos, is important.
- Comfortable footwear for in camp is recommended; avoid bare feet.
- If participants have been active during the day, it is suggested they be advised to change clothes once in camp for the evening to avoid chilling.
- Latrine facilities should be dug an appropriate distance from watercourses and camp; at least 50 meters, and more if porous soil.
- With the exception of winter camping, eating areas, sleeping areas, and watercourses should be separated by at least 50 meters.
- Food hanging areas should be at least 50 meters from eating and sleeping areas. Consider prevailing winds; tenting areas should be upwind of cooking and food hanging areas when wildlife poses a concern.

Section 7-6

- Check proposed site for potential hazards (e.g., overhanging, dead trees, rock fall, flash flood, wind, avalanche).
- If open fires are to be used, precautions should include the following:
 - secure a fire permit if one is required,
 - ensure that proposed fire site is safe from overhanging branches, the effects of wind or other hazards,
 - keep size of fire manageable, area around fire clean, and a sufficient quantity of water, soil or sand handy to douse flames or contain the fire,
 - keep flammable objects away from the fire (e.g., packs, tents, sleeping bags) to prevent sparks from damaging items,
 - take care when wearing nylon clothing near open flames,
 - NO HORSEPLAY rules must be shared and enforced,
 - ensure participants know what to do if their clothing catches fire (e.g., smother flames with water, dirt, etc.; stop, drop and roll), and
 - ensure the fire is fully extinguished before departing the site.

Cooking/Dishes

If undertaking significant responsibility for providing food/meals to a group, secure and follow the relevant provincial health regulations for the preparation, cooking and storage of foods, adapting as relevant to the trip context.

Establish a safe and well-organized kitchen/cooking area, whether large group or small group cooking is being done. Consider the following, as relevant:

- The cooking area should be established in a safe location (e.g., minimize potential for cooks to trip, slip or otherwise be hindered).
- Whether using a stove or cooking fire, establish a 1 - 2 meter “safe” area around it, with only those directly involved in food preparation and cooking allowed.
- Require hand washing/cleaning prior to preparing food or cooking.
- If participants will be involved in food preparation/cooking, review relevant safety precautions (e.g., use of knives, use of camp stoves or other cooking equipment).
- Cooks must be careful of hazards like loose clothing (e.g., roll up long sleeves) or long hair (e.g., tie back).
- If fuel-based appliances are used, it is advisable to ensure directions for refueling, lighting, operation and emergency procedures are on the appliance or container (e.g., typed out in font legible in low light, laminated and taped on).
- Staff should keep the fuel with them, having participants come for it as needed.
- Staff and participants should not refuel a hot appliance (e.g., stove, lantern) or refuel near open flame from operating stoves or an open fire. Replace fuel caps securely and remove fuel bottles from the cooking area after refueling.
- If using single-burner camp stoves, use an appropriate number (about one stove per six participants maximum) of appropriate stoves (e.g., white gas, propane).
- Set out and prepare cooking utensils and food as much as practicable before lighting stove to minimize last minute scrambling around a lit stove.



- Encourage participants to take care when handling pots/pans of hot liquids/foods; e.g.:
 - use gloves and/or pot grips when handling hot pots,
 - set small containers down on a stable, flat surface while pouring into from pot/pan, and pour away from the body,
 - remove pots from the stove/fire before stirring or adding food, and
 - pass hot items around rather than over another person.
- Sterilize cooking/eating utensils daily to minimize potential for bacterial growth that can cause or contribute to intestinal illness. See **Food Preparation and Cooking** in **Section 4**.

Instruction

- Program and equipment should be planned in detail with contingency plans for inclement weather (e.g., bring a tarp(s), parachute or other group shelter).
- Food items, gum, sunscreens, repellants and cosmetics (including toothpaste and deodorant) and clothing worn while cooking should not be taken into tents. Instead, hang them with the foodstuffs (up out of reach of bears), or store them in bear-proof containers or vehicles located a safe distance away.
- Establish and enforce safety procedures and rules for the use of knives if participants have them (e.g., use a hard surface to cut items, rather than using a leg or hands; in general, cut away from the body).
- Establish and enforce safety procedures and rules related to camp tools like saws and axes. Saws are preferable to axes from a safety perspective (i.e., they result in fewer and less serious injuries). Avoid the use of hatchets with inexperienced participants (greatest potential for injuries, including head injuries). Only allow participants to use axes (full or 3/4 length) if able to devote substantial time to training them regarding the tool, properties of the item(s) to be chopped, and safety procedures (e.g., site selection/preparation, stance, stabilizing item to be chopped).
- Participants should be aware of camp boundaries and assembly procedures.

Supervision

- On-site supervision (up to age 8) or in-the-area (age 9+) with night checks by male and female supervisors, as appropriate.
- Participants filling and lighting camp stoves, lanterns or other appliances or using open fires should be under constant visual supervision, unless and until leader is confident they have mastered these skills.
- Participants should only use axes, saws or knives under supervision, until skills are mastered.
- Ratio as per calculation.
- A process for regular accounting of the participants should be in place.
- A buddy system should be used.
- See **Overnight Supervision** in **Section 4 Special Considerations**.

Section 7–8

Day Hiking and Backpacking

Day Hiking (> 3 hours)

Age 8+

Overnight Backpacking

Age 11+

Extended Backpacking

Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Day Hiking: refers to walking with light daypacks, without the expectation of camping overnight. See **Day Hiking** in **Section 5** if the hiking activity is a local, low risk outing less than three hours duration. The section below will build on rather than repeat this information.

Backpacking: refers to carrying the clothing, equipment and provisions the group needs to camp out one or more nights on the trail.



Day Hiking (> 3 hours): *all of Day Hiking in Section 5 plus:*

Known Potential Risks

- Complications of an injury or illness due to remoteness and time to emergency services.

Leader Readiness

- The leader must be competent to organize the day hiking or backpacking activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the day hike or backpack is to be, the more knowledge, skill, fitness and experience the leader must have.
- Assistant leaders should have adequate knowledge, skill, fitness and related experience to support the group.

Equipment/Location

- Have a map of the route (e.g., park or trail map of local area, topographic map if in more remote setting), compass (if relevant – not needed for a hike in a local park), and GPS, as appropriate, with thorough knowledge of their use. Have a tide table if on coastal hike where relevant. Copy of map (and/or itinerary card) should be on file at sponsoring organization. If day hike originates from base camp, a map and itinerary card should be left with the supervisor at base camp.
- Stay on designated trails unless there is a program goal, which requires going off-trail (e.g., exploring a meadow, cross-country navigation practice).
- Stay below 2,500 meters (8,000 feet) to avoid potential mountain sickness or pulmonary edema, unless a very mature group and sufficiently acclimatized.
- Each participant should carry their own pack, complete with water, food, extra clothes, raingear, survival kit, and/or other items as appropriate to the hike.

Instruction

- Consider any potentially disabling chronic knee, foot or other relevant limitations that could be exacerbated. Discuss with parent(s)/guardian(s) to determine if a pre-existing condition could endanger the participant and/or the group.

Supervision

- As per **Day Hiking in Section 5**, considering increased risks related to remoteness and time to emergency services.

Section 7–10

Backpacking – Overnight/Extended: *all of Day Hiking plus:*

Additional Known Potential Risks

- Injuries related to lifting, carrying, walking with, or putting down the pack;
- Burns or scalds related to use of fires, camp stoves and/or the handling of hot food or liquid;
- Cuts related to the use of knives, axes or saws;
- Illness related to poor personal hygiene, failure to purify drinking water, or failure to sanitize dishes;
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Instruction

- Participants, particularly children under 16, should not carry more than 20-25% of their body weight. This will necessarily limit the duration of backpacking trips that younger or smaller participants can participate in unless there is another means of carrying their gear (e.g., a parent/guardian attending with them and carrying their own as well as some of the child's gear and a share of the group's gear as appropriate).
- Instruct participants regarding appropriate packing of their backpacks and adjusting their backpacks for proper fit.
- Instruct participants regarding safe procedures for donning and taking off heavy backpacks. Encourage buddy assistance.
- Provide appropriately detailed explanations of hazards encountered (e.g., river crossing, scree slope, etc.) and procedures to follow so that participants understand the hazard and what they are to do, including contingencies. The potential impact of some hazards can be much more significant when the weight of loaded backpacks are added.
- Avoid travel in darkness except for emergencies. Try to select a camp spot with sufficient daylight left for everyone to get camp set before nightfall. Accidents tend to happen at the end of the day when people are tired on the trail and while setting up camp before dinner.

Supervision

- In-the-area supervision.
- Ratio as per calculation.

See **Base/Remote Camping**.



Cycling

Day Tripping (> 3 hours)

Age 10+

Overnight Tripping

Age 11+

Extended Tripping

Age 12+

Cycling: refers to riding on roads or hard surface trails. A road bike, mountain bike or hybrid may be used for this purpose.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

See **Cycling** in **Section 5** for local, low risk half-day or less cycling context guidelines (e.g., cycling on-site instruction, half day or less cycle trips in the community). The guidelines below build on the Section 5 material.

Known Potential Risks: see Cycling in Section 5 plus:

- Complications of an injury or illness due to remoteness and time to emergency services.

Cycling Day Trip (> 3 hours): all of Cycling in Section 5, plus:

Equipment/Location

- If planning a long ride and/or one in a remote area, check bikes out more thoroughly, (e.g., wheel trueness, bottom brackets, pedals, headset/gears and visible bolts).

Instruction

- As per **Cycling Day Trip** in **Section 5**.

Supervision

- As per **Cycling Day Trip** in **Section 5**.

Section 7–12

Cycling Overnight/Extended Trip: *all of Day Trip, plus:*

Equipment/Location

- Encourage the use of stiff soled shoes and ensure that if toe straps are used, they are sufficiently loose and the buckles are positioned in a manner that they do not cut into the side of the feet or they may cause plantar nerve palsy (numb toes).
- For long rides, cycling or other padded gloves should be worn and/or extra padding/tape put on the handlebars to avoid ulnar nerve palsy, which causes numbness of the hands.
- Ensure that panniers are appropriately packed and balanced on each bike, with loads distributed low and roughly evenly around the bike (both front to rear and left to right). Place heavy items close to the bike.
- Encourage packing light for extended trips, including consideration of appropriate food (e.g., dehydrated, freeze dried).
- Pack gear in waterproof containers or plastic bags inserted into panniers.
- Heavy packs should not be worn on the back because of resulting reduced riding stability and potential for back injury and/or arm fatigue. Use panniers and/or tow carts for heavy loads.
- If appropriate, a support vehicle traveling behind the group can offer a back-up in the event a bike needs major repairs or replacement or a rider cannot continue.

Instruction

- Encourage participants to vary their riding position and hand position on the handlebars frequently to avoid overuse stress.
- Avoid travel in darkness except for emergencies. Try to select a camp spot with sufficient daylight left for everyone to get camp set before nightfall.
- Try to plan overnight and especially extended cycle tours for mid-April - June, when the weather and road or trail conditions tend to be most favorable and the participants will have had the maximum amount of time to plan and develop their skills and fitness.
- Attend to planning and preparation of participants re: content knowledge, skill and fitness development. While most youth can ride a bike, a long ride and/or one involving carrying gear is significantly more challenging.
- Consider doing a shakedown daytrip or overnight with loaded bikes prior to an extended tour to check out gear and group capacity.
- Warn participants that acceleration is sluggish and that it is harder to stop in control with a loaded bike, so adjust their pace accordingly.

Supervision

- As above.

Refer to **Base/Remote Camping** sections for other relevant considerations.



Mountain Biking • BMX Biking

On-site Instruction	Age 8+
Day Tripping (< 3 hours)	Age 9+
Day Tripping (> 3 hours)	Age 10+
Overnight Tripping	Age 11+
Extended Tripping	Age 12+

Mountain biking: refers to the use of mountain bikes for riding or touring on less developed trails that typically require some degree of maneuvering through and around obstacles such as narrowly spaced trees, rocks, roots, mud, streams, steep hills, etc.

BMX biking: refers to riding small-wheeled bicycles, with use similar to that done on mountain bikes or in BMX (typically short course of dirt hills) or skateboard facilities. BMX does not involve overnight or longer outings.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- As per *Cycling* above and in Section 5, considering the selected terrain.

Section 7–14

Mountain Biking/BMX On-site Instruction

Leader Readiness

- The instructor must be competent to organize the mountain biking activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training may be secured through the Alberta Cycling Association, the Canadian Cycling Association, the National Coaches Certification Program (NCCP), or other appropriate sources.
- All leaders/supervisors should be competent, experienced cyclists.
- If going off-site, at least one leader/supervisor should be competent in basic bicycle repair and maintenance, with more skill required in this area for longer, more remote trips.

Equipment/Location

- An appropriate trail must be selected for the age and ability of the group. Assess hazards en-route and determine an appropriate strategy.
- Ensure that mountain biking is permitted on any trails selected in parks and protected areas.
- Protective eyewear should be worn at night or on trails where branches protrude.
- Participants should wear brightly colored clothing when riding on trails or dirt roads, particularly if it is hunting season in the area.
- For BMX riding, leg and arm protective pads are recommended.

Instruction

- Instruct participants about natural hazards present on or along the trail (e.g., rocks, tree roots, streams) and how to safely negotiate these. Attention should be given regarding when to ride and when to walk the bike.
- Participants should be taught and practice falling and rolling from their bikes on soft ground before they are taken riding on highly uneven surfaces.
- Participants should be competent at selecting and shifting gears effectively in response to changes in incline before venturing onto hilly trails.
- If sharing the trail with other recreational users such as hikers and horse riders, ensure that riders are familiar with protocols for safety and courtesy (e.g., ride under control and at reasonable speed; make verbal/bell contact, especially if coming up behind someone; get off bikes, move off to side and stand still while horse groups pass).
- If riding in bear country, particularly where heavily wooded, avoid group spreading out along the trail excessively.
- Inappropriate use of mountain bikes can destroy an area, especially during wet conditions, rendering the area dangerous for future riding. Avoid such impacts (e.g., walk across muddy areas, avoid locking up brakes and skidding the rear wheel, which can create erosion ruts).



Mountain Bike Tripping (Day/Overnight/Extended): *all of On-site Instruction, plus:*

- Instruct the participants regarding the presence of any visible hazards and their appropriate management (e.g., getting over or around logs across or large rocks on the trail, crossing streams).
- Recognize the potential complications of biking with loaded panniers on uneven terrain; be more conservative and prepared to get off the bike to walk more often to protect rider safety and the bikes.
- Because trail cyclists move significantly faster than hikers, be particularly cautious in bear country. Encourage riders to attach noisemakers to their bikes or persons and/or to talk or sing when in closed woods.
- Be particularly cognizant of how much farther biking can take a group than hiking. The group that ventures far into the backcountry must be very well-prepared and self-sufficient.

Review **Base/Remote Camping** considerations.

Section 7-16

Ropes Courses • Challenge Courses

Age 8+

Low and High Ropes/Challenge Courses

The use of low and high ropes courses, zip lines and structures made of combinations of ropes and other materials (e.g., wood, tires) for personal and/or group development (some elements require a pair or group to work together for success) is well-established in Alberta and many camps and outdoor centres have these courses on site.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and/or falls, including falling from a height;
- Injuries related to colliding with another person or with a fixed object;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Injuries related to objects falling from above;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia in cold or wet weather due to insufficient clothing;
- Loss of hand dexterity in cold or wet weather;
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Illness related to poor personal hygiene or failure to purify drinking water;
- Injuries related to encounters with animals and plants in the environment;
- Allergic reactions to natural substances in the environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.



Leader Readiness

- The instructor must be competent to organize the ropes/challenge course activity; to demonstrate, instruct and supervise it, and to effect rescue and emergency procedures as necessary.
- Training will include general content, but will be somewhat site-specific, as different ropes courses will have different elements.
- Assistant leaders should have adequate knowledge, skill, fitness and related experience to support the group.

Equipment/Location

- Generally, the service provider or owner/manager of the course is responsible for:
 - design and construction of the course (may be contracted out);
 - regular inspection;
 - maintenance and repair of the structure and logging of such;
 - selection, purchase, logging, and retirement of ropes and hardware;
 - securing the structure when it is not in use;
 - providing instruction and supervision of school groups using the structure; and
 - providing rescue to any participant who gets ‘stuck’ on the structure.
- The Association for Challenge Course Technologies can be a valuable resource in designing an appropriate safe course and ensuring that appropriate standards of construction and operation are met. Leaders retain the right and responsibility to ask questions about any of the above if they have a concern.
- The service provider or course constructor/manager is also responsible for considering that the strength and integrity of a ropes/challenge course element and anchoring associated with it may be affected by environmental conditions (e.g., trees with diseases not visible or obvious, high winds, ultraviolet light, lightning, damage to root systems, erosion, and rot). Again, group leaders retain the right and responsibility to ask questions or share concerns with site managers.
- It is also to be understood that any permanent or temporary set-up used reduces the strength of the individual materials involved. Knots in ropes or bends in cables; clamps on cables; angles, twists and turns; and the contact of one kind of material with another all affect the structure negatively. These must be considered in design and use of the course.
- Use locking carabiners (ensure locked) or two carabiners with offset gates (ensure offset) where carabiners are used on all high elements.
- Use appropriately sized and fitted helmets on all high elements and when belaying below the course.
- Ropes, harnesses and associated climbing equipment must be designed to meet the requirements of the activity.
- Zip line riders must always be outfitted with a safety harness.
- Sit or body harnesses may be used. All harnesses must be checked by a qualified instructor/leader to ensure they fit and are worn in accordance with the manufacturers’ instructions.

Section 7–18

- Only full weight single ropes designed for climbing may be used for belaying. Ropes must be regularly inspected (checking for flat spots, sheathing separations, cleanliness, etc.), and be found in safe condition. Ropes must be retired at 4 years or 100 days or 800 hours of use or after a major fall (whichever comes first) or less. Equipment purchase and maintenance logs must be kept.
- Only approved belay systems may be used. The manager of the ropes course is responsible for understanding the strengths and weaknesses of each system (e.g., Gri-Gri, stitch plate with spring, ATC, belay tube, Münter hitch, figure 8), selecting an appropriate one, and having procedures in place to compensate for its inherent weaknesses.
- The instructor must know and be capable of carrying out emergency procedures related to a participant stalled or injured at any point on the course and have whatever supplementary equipment may be necessary for this task.
- Participants must always be secure/on belay on high elements.
- Instructor/leader should be familiar with the ropes/challenge course facility, including potential hazards to be monitored and/or warned of (e.g., a loose bolt).
- The routes selected or set up must be within the physical and psychological capabilities of the participants. The ideal site will have a progressive series of increasingly challenging elements.
- Adjust course obstacle selection/use, as appropriate, based on weather conditions, e.g., wet obstacles may be slippery and cold or gloved hands may not perform well.
- Participants should remove all rings, necklaces, watches and other jewelry that may become snagged in apparatus, climbing ropes or hardware.
- Appropriate clothing must be worn (e.g., nothing too loose that may catch in equipment; tuck in oversized t-shirts). Recommend snug-fitting footwear (no open-toed shoes or sandals). Long hair should be tied back.
- The ropes course, especially any high elements, should be designed and signed to deter unauthorized access when it is not in program use.

Instruction – As appropriate to the particular course and elements, the technical instructor will be responsible for the above plus:

- Because moving on ropes/challenge courses requires use of one’s body in ways often new and different from everyday movement, a warm-up is advised to minimize the potential for injury and post-activity soreness.
- Participants should be instructed to stand clear from the ropes course if they are observing (i.e., not below any elements of it).
- Match partners for paired tasks so they are relatively equal in height and weight.
- For low ropes course elements where participants are to spot each other, instruct them regarding appropriate spotting technique, including the importance of constant visual observation of the person on the element by the spotter, self-protection of the spotter and the difference between “spotting” and “catching”. Having each participant do a low-level practice jump off of the element while their spotter(s) demonstrate the technique may increase the confidence and safety of both.



- Warn participants about hazards in the area, particularly when not obvious, and brief them regarding procedures prior to their participation.
- Define how many climbers can be on the element at a time, direction of travel around courses, and what appropriate spacing looks like if congestion could pose safety problems.
- Participants should be taught the essentials of the equipment (e.g., what it is, what it is for), and basic care of it (e.g., not to step on ropes or drop hardware).
- Participants should be warned to stay off the ropes course when they are not supervised.
- High ropes course related safety procedures should be outlined to participants, such as:
 - attention to falling objects or climbers,
 - putting on harnesses and harness tie-in or clip-in (if participants are doing this),
 - rope and belay systems to be used, and
 - two-way communications system.
- Participants should be taught how to clip and unclip from one part of an interrupted course to another, using a double belay rope set up that prevents them ever exposing themselves to an unprotected fall.
- Participants are not allowed to belay until they have been trained and demonstrated proper technique in clipping into anchors, belaying, “catching” falls and lowering.
- A back-up belayer should be used, wherever appropriate.
- Instruct participants not to move faster than their belayers can take up rope.
- Encourage challenge by choice, as long as participants do not exceed their own limits. Encourage extra care be taken when pushing challenges (e.g., wearing blindfolds).

Supervision

- On-site supervision by technically trained instructor/supervisor.
- Constant visual of equipment of participant prior to going up onto high element, and his or her belayer and back-up belayer just prior to ascent, and of the participant on the course who is clipping and re-clipping to move from one element to another at height. Belayers can be trained to supervise the re-clipping procedure, using a specific two-way communication system to reduce the potential for errors.
- Supervision ratio calculated should consider the layout of the ropes/challenge course area.

Section 7–20

General Considerations for Climbing Activities

Bouldering: involves free climbing (without belay) no higher than a height from which the climber is prepared to fall and land safely. Instead of using ropes to protect against falls, the climber uses a spotter, a more effective system with the short distances involved.

Artificial Climbing Walls: are structures made of wood, stone or manufactured holds attached to a wall to simulate the types of climbing problems one would encounter when climbing on a real rock wall. They bring climbing to people rather than making them travel long distances to the mountains, and offer greater control than that often offered in the natural environment. Artificial climbing walls can be used for bouldering or belayed climbing.

Rock Climbing: involves climbing up cliffs using the holds and cracks found on the surface of the rock. Ropes are employed as a safety backup, with a person belaying the climber and “catching” any falls using a mechanical friction system.

Rappelling and abseiling: are means of descending. Rappelling involves maintaining some contact with the feet on the wall and abseiling involves a free descent on the rope only.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and/or falls, including falling from a height;
- Injuries related to collisions with movable (e.g., other participants) or immovable (e.g., wall) objects;
- Injuries related to a piece of the wall or cliff being climbed fracturing off, causing an injury or a fall;
- Injuries related to objects falling from above;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia in cold or wet weather due to insufficient clothing;



- Loss of hand dexterity in cold or wet weather.
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Illness related to poor personal hygiene or failure to purify drinking water;
- Injuries related to encounters with animals and plants in the environment;
- Allergic reactions to natural substances in the environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Note: Some of these risks will not or may not be present in indoor sites (e.g., hypothermia).

Leader Readiness

- The instructor must be competent to organize the climbing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training may be secured through the Association of Canadian Mountain Guides (ACMG) or one of the many climbing sites or camps that offer comparable instructor training courses, or other appropriate sources.

Section 7–22

Bouldering

Age 8+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Climbing Activities in Section 7.*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Climbing Activities.

Equipment/Location

- Select a site that limits the height climbers can go, ideally by using a facility with an appropriate natural upper limit on the bouldering surface or by marking one on the wall (e.g., using tape or chalk) so the climbers know immediately when their hands have reached the upper limit and they must begin to traverse or descend, as appropriate. An appropriate height is one where the climbers' feet go no higher than their spotters' shoulders. For example, if the average spotter's shoulders are at about 1.5 m (3.5'), and the average climber in the group could reach up about 2.5 m (6.5') from that height, the upper limit established for that group should be about 3.5 m (9') from the ground/floor. That is the height at which the wall should be marked for these climbers (i.e., not allowed to reach above that height).
- Use an established bouldering area rather than opening a new one, where possible, and encourage participants to avoid modifying the boulder (e.g., removing moss, plants).
- Inspect the climbing site to determine the current conditions. Considerations include, but are not limited to: loose holds if an artificial climbing facility; and if a natural facility outdoors, new rock fall, loose or wet/slippery rocks, blown-down trees, nesting birds or stinging insects.
- Ensure the landing area is reasonably safe (e.g., relatively even, free from obstacles) and/or that participants climb more conservatively at a site with a less ideal landing area. Landing mats may be used to help soften landings.
- If spotting would be an inadequate safety system, considering the site and the participants, climbers must be belayed.
- Participants should wear appropriate, well-fitted footwear.



- Ensure participants remove or tape down all jewelry and remove all objects from their pockets, which might cause injury (to themselves or their spotters) in a fall.
- Participants who wear eyeglasses should tie them on.
- Consider the use of helmets. Assess the group and venue and if head injury is a concern, have participants wear a helmet.

Instruction

- Match bouldering partners so they are relatively equal in height and weight.
- Instruct participants not to climb above the line/mark identified as the upper limit for the activity. Spotters may also notify them here.
- Participants should be instructed in basic climbing techniques where such instruction will support safe participation in the climbing activity and environment selected. Skills taught may include:
 - climbing with the legs,
 - balancing,
 - weight shifting,
 - using hand and footholds, and
 - encouraging novices to keep 3 points on the rock at a time. (This does not preclude “exploratory climbing” prior to formal instruction, as long as this can be done safely).
- Instruct participants regarding appropriate spotting technique, including spotting stance, the importance of constant visual observation of the climber, self-protection of the spotter and the difference between “spotting” and “catching”. Having each climber do a low-level practice jump off of the wall and the spotter demonstrate proper spotting may increase the confidence and safety of each.
- Warn participants about hazards in the area (e.g., potential falling objects).
- Define how many climbers can be on the climbing surface at a time and what appropriate spacing looks like if congestion could pose safety problems. For example, a low traverse could accommodate a steady stream of climbers and their spotters moving across, and then walking back to the front end and switching places to go again.
- Warn climbers not to climb above or below another climber.
- Consider both the physical and psychological capabilities of the participants and avoid pushing them to try things they aren’t ready for.

Supervision

- On-site supervision by instructor.
- Constant visual supervision of climber by his or her spotter.
- Ratio as per calculation, with special consideration given to the potential impact of any hazards present, exit route from the top of the route (if appropriate), and layout of the bouldering area.

Section 7–24

Artificial Wall Climbing (Indoor or Outdoor)

Age 7+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Climbing Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Climbing Activities.

Leader Readiness

- The leader knows and adheres to the safety and operations plan of the wall being used. This includes the knowledge, skill and capacity to deal with foreseeable problems such as a jammed belay device, stuck climber (e.g., finger caught in a hold or hanger).
- Instructor can ascend a fixed rope (e.g., using ascending device or prussiks) and rappel or abseil in a controlled manner using a method of self-protection.

Equipment/Location

- This activity is generally undertaken at a venue controlled by a service provider (e.g., a climbing gym, outdoor tower), although numerous municipalities and youth serving organizations are constructing indoor or outdoor walls for their participants to climb. Appropriate staff (i.e., Facility Manager) needs to have a working knowledge of the construction of the wall, including the following terminology and accepted usage and standards associated therewith:
 - safe working load,
 - minimum breaking strength,
 - carabiners (kinds, materials, strengths),
 - pulleys (kinds, sizes, strengths),
 - belay devices (kinds, materials, strengths),
 - static and dynamic belay methods,
 - belay anchors and harnesses (kinds, materials, strengths).

Program leaders retain the right and responsibility to ask a service provider questions about any of the above if they have a concern.



- Restricted to approved, safety inspected facilities.
- Instructor or capable other to inspect the climbing site to determine the current conditions. If an outdoor wall, considerations include, but are not limited to: loose holds, blown-down trees, nesting birds or stinging insects.
- Use locking carabiners and double check that they are locked when in use or use two non-locking ones with gates offset.
- Either sit or body harnesses may be used. All harnesses must be checked by a qualified instructor to ensure they fit and are worn in accordance with manufacturers' instructions.
- Only full weight single ropes designed for climbing may be used for belaying. Ropes must be regularly inspected (checking for flat spots, sheathing separations, cleanliness, etc.), and be found in safe condition. Ropes must be retired at 4 years or 100 days or 800 hours of use or after a major fall (whichever comes first) or less. Equipment purchase and maintenance logs must be kept.
- Any and all hardware dropped onto a hard surface from more than 1 meter (3') must be replaced.
- If belaying from above, two independent anchors must be used for each belayer; one anchor is sufficient if belaying from below the climb.
- Only approved belay systems may be used. The wall manager is responsible for understanding the strengths and weaknesses of each system (e.g., Gri-Gri, stitch plate with spring, ATC, belay tube, Münter hitch, sport belays with a figure 8), selecting an appropriate one, and having procedures in place to compensate for its inherent weaknesses. Body or classic belays are prohibited.
- Belay ropes need to be positioned to minimize potential for excessive rope wear or damage, and/or climber pendulums.
- Instructor/leader should be familiar with the climbing facility, including potential hazards to be monitored and/or warned of (e.g., a known loose hold). The routes selected or set up will be within the physical and psychological capabilities of the participants. The ideal site will have a progressive series of increasingly challenging routes or the opportunity for participants to choose not to use all holds available.
- Prior to a climbing session, the instructor should inspect all equipment (i.e., ropes, harnesses and hardware) to ensure there are no signs of breakage or weakness.
- Helmet use may be required by the facility or by the program authority. If so, ensure that they are properly fitted and adjusted.
- A first aid kit must be accessible on site or brought by the group leader; clarify with facility operator.
- Appropriate clothing must be worn (e.g., nothing too loose that may catch in equipment; tuck in oversized t-shirts). Recommend snug-fitting footwear (no open-toed shoes or sandals). Long hair should be tied back.
- Participants should remove or tape down all rings, watches, necklaces and other jewelry that may become snagged in climbing ropes or hardware and remove any items from their pockets that may cause injury while hanging from the harness or in a fall.
- Keep the base of the climb free of obstacles.

Section 7–26

- When not in use, the climbing wall should be inaccessible to unauthorized users and/or signed and participants warned to stay off it when not supervised. Climbing equipment should be removed or secured when not in use.
- Climbing outdoors should not be undertaken after dusk unless the site is lit.

Instruction

- No lead climbing by participants, unless part of an extensive training program and following securing informed consent from the participants' parents/guardians.
- Placement of protection by participants is allowed only if simultaneously top-roped.
- Relevant safety procedures must be clearly outlined to participants, such as:
 - attention to falling objects or climbers,
 - proper harness fitting and use,
 - harness tie-in or clip-in (if they are doing this), and
 - rope and belay systems to be used.
- Because climbing requires use of one's body in ways often new and different from everyday movement, some warm-up exercises should be conducted to minimize the potential for injury and residual soreness.
- Participants should be taught the essentials of the equipment (e.g., what it is, what it is for), and how to take care of it (e.g., don't step on ropes or drop hardware).
- Participants should be instructed in basic climbing techniques where such instruction will support safe participation in the climbing activity and environment selected. Skills taught may include:
 - climbing with the legs,
 - balancing,
 - weight shifting,
 - using hand and footholds, and
 - encouraging novices to keep 3 points on rock at a time. (This does not preclude "exploratory climbing" prior to formal instruction, as long as this can be done safely).
- Participants are not allowed to belay until they have been trained and demonstrated proper technique in belaying, "catching" falls and lowering at an appropriate speed.
- A back-up belayer may be used where appropriate, especially for young climbers and with some types of belay devices (e.g., belay tube).
- Participants should be instructed not to climb faster than their belayer(s) can take up rope.
- Participants should be taught climbing communications as appropriate to their climbs and encouraged to use these terms to minimize conversation and confusion between teams working on different routes.
- Participants should be encouraged to notify the instructor of any hazards (e.g., a loose hold).
- Encourage challenge by choice, as long as participants do not exceed their own limits.



Supervision

- Careful visual check of equipment setup and harnesses is essential.
- Constant visual supervision of belay set-up and belaying until the instructor is satisfied that the participant has sufficiently mastered the technique.
- On-site supervision for climbing and belaying once belayers are competent.
- Constant visual supervision for all lowerings.
- Determination of an appropriate supervision ratio includes consideration of the instructor's competence, group maturity, and characteristics of the climbing site. If the participants are mature and all ropes are on the same wall and in close proximity to each other, then a capable, experienced instructor who can maintain a disciplined instructional environment with redundant safety systems built in may be able to safely manage up to five stations. The norm will likely only be about three stations.

Section 7-28

Rock Climbing (Outdoor: top rope, fixed face)

Age 9+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Climbing Activities in Section 7.*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Climbing Activities.

Leader Readiness

- If the instructor/leader is to be working with participants at a natural site, they must have sufficient training and experience to understand and appreciate the risks present in the environment and manage these safely with the participants.
- The leader knows and adheres to the safety and operations plan of the site being used. This includes the knowledge, skill and capacity to deal with foreseeable problems such as a jammed belay device, stuck climber (e.g., finger caught in a hold or hanger).
- Instructor can ascend a fixed rope (e.g., using ascending device or prussiks) and rappel or abseil in a controlled manner using a method of self-protection.

Equipment/Location

- Inspect current conditions at site. Considerations include, but are not limited to: new rock fall, loose rocks, blown-down trees, nesting birds, or stinging insects.
- Approved, appropriately sized/fitted rock climbing helmets must be worn by climbers, belayers, and others when in the climbing area or where there is rockfall potential.
- Be familiar with the facility, including potential hazards to monitor and/or warn of.
- The routes selected or set up will be within the physical and psychological capabilities of the participants. The ideal site will have a progressive series of increasingly challenging routes or the opportunity for participants to choose not to use all holds available.
- Avoid climbing on excessively wet and/or slippery rocks.
- Anchors should be independently established for belays and tie-offs.



Instruction

- No lead climbing by participants, unless part of an extensive training program and following securing informed consent from the participants' parents/guardians.
- Simultaneous top-roping if practicing placing of protection.
- The instructor should inspect and test the anchor system.
- Participants must be tied/clipped in to an instructor/leader inspected anchor system when at the top of the rock face.

Supervision

- Same as considerations as for **Artificial Wall Climbing**, with appreciation for the potential increases in risk of a less “managed” site.
- The absence of natural “supervision ideal” sites will necessitate the setting of a smaller number of climbing stations per instructor than a climbing gym environment may allow. It would be exceptional to find a site where one instructor could adequately supervise more than three to four stations at the same time.

Section 7–30

Rappelling • Abseiling

Age 10+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities, and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Climbing Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Climbing Activities.

Leader Readiness

- If the instructor/leader is to be working with participants at a natural site, they must have sufficient training and experience to understand and appreciate the risks present in the environment and manage these safely with the participants.
- The leader knows and adheres to the safety and operations plan of the site being used. This includes the knowledge, skill and capacity to deal with foreseeable problems such as a jammed belay device, stuck climber (e.g., finger caught in a hold or hanger).
- Instructor can ascend a fixed rope (e.g., using ascending device or prussiks) and rappel or abseil in a controlled manner using a method of self-protection.

Equipment/Location

- While there are many procedures that are similar to rock climbing, there are specific areas of concern that rappelling or abseiling instructors must be aware of. These include but are not limited to:
 - the use of appropriate hardware (e.g., figure of eight descenders and locking carabiners),
 - ensuring that loose clothing, equipment and hair will not become lodged in rappelling devices, and
 - appropriate signals for rappelling.
- Static ropes (no stretch) are recommended for rappels and dynamic ones for belays.
- Rappelling or abseiling participants must be belayed by separate ropes on independent anchor systems, unless a self-locking rappel device is used.



- A back-up belay system used in addition to the participant-controlled rappel system. The system must allow for a participant to be lowered in the event they become unable to rappel/abseil the route themselves (e.g., hair or clothing entangled in rappel device).
- Instructor must inspect and test system before participants use it.
- Approved, appropriately sized/fitted rock climbing helmets must be worn by rappellers, belayers, and others when in the rappelling area or where there is rockfall potential.

Instruction

- Following instruction, the instructor maintains contact with participants to confirm that knots, harnesses, belays and anchors are being used properly.
- Participants are taught to maintain control while rappelling/abseiling and to use a safe rate of descent that will not damage the ropes. They should practice the techniques before actually rappelling/abseiling.
- The participants should be instructed in safety procedures, as appropriate to the activity: e.g.,:
 - appropriate and adequate rappelling/abseiling and belaying equipment,
 - site conduct especially in regards to edge behavior, falling objects and walking around the site,
 - international two-way communication system,
 - anchors,
 - belays,
 - use of helmets,
 - appropriate and adequate rappel/abseil and belay technique, and
 - harness fitting and tie/clip-in process, if participants are doing this.
- Rope is tied or clipped in directly to a properly fastened harness.
- Participants should be taught to avoid damaging cliff face ecosystems while rappelling.
- Participants should be discouraged from bouncing, swinging wildly or descending rapidly as these practices may have potential to pull anchors, overheat friction devices and damage the ropes.

Supervision

- Careful visual check of equipment setup and harnesses is essential.
- Constant visual supervision of all rappels/abseils by a competent instructor/leader. This implies that one instructor/leader should only manage one station at a time. If more stations are needed, additional qualified supervisors must be recruited.
- A competent individual (supervisor/mature competent participant) needs to be at the bottom of the rappel/abseil to help untie/unclip the harness and send equipment back up as needed.

Section 7–32

Horseback Riding

Pony Rides	Age 5+
On-site Instruction	Age 6+
Day Tripping (< 3 hours)	Age 8+
Day Tripping (> 3 hours)	Age 9+
Overnight Tripping	Age 10+
Extended Tripping	Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Pony Rides/On-site Instruction/Day Tripping

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and/or falls;
- Injuries related to falling or being thrown off the horse or a horse falling or rolling with its rider;
- Injuries related to colliding with another rider or with a fixed object (e.g., fence);
- Injuries related to being struck by a vehicle (if riding on/along or crossing roads);
- Injuries related to being dragged by a horse due to entrapment in a stirrup or rein;
- Injuries related to a horse kicking, biting or crushing;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia in cold or wet weather due to insufficient clothing;
- Loss of hand dexterity in cold or wet weather;
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Injuries related to encounters with animals and plants in the environment;



- Allergic reactions to natural substances in the environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Leader Readiness

- The instructor must be competent to organize the horse-related activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training may be secured through the Equine Canada - Hippique Program, the Certified Horsemanship Association, Alberta Equestrian Federation or other appropriate sources.
- Assistant instructors/leaders must have adequate knowledge, skill, fitness and experience to support the participants and animals on the outing or trip.
- It is important that the lead rider is a capable horseperson who can read the terrain and make appropriate decisions regarding the route and dealing with hazards encountered, considering both the riders and the horses involved.

Equipment/Location

- Generally, a service provider is used for this activity and it will be assumed that they will be responsible for stabling, feeding, watering and otherwise tending to the animals and tack.
- The horses used must be suitable for beginner riders and the terrain to be used.
- Novice riders must receive a riding lesson in an arena/pen before being taken trail riding, other than on a short pony ride.
- Trails selected should be appropriate for the abilities of the participants and of the animals.
- Riding on or along or crossing roads should be avoided as much as possible.
- The instructor is responsible for:
 - matching the mount to the rider's skills;
 - properly fitting appropriate, safe tack to the mounts;
 - tack adjusted for each rider and checked; and
 - awareness of crowding, moody animals, and loose girth.
- Properly sized and adjusted helmets must be worn. The service provider should provide these.
- Riders should wear appropriate clothing (long pants) and footwear (e.g., closed toe). If tapaderos (stirrups with closed front) are not available, participants must wear shoes/boots with a heel. Clarify with service provider, as appropriate.
- No loose items that could blow off and spook a horse should be worn.
- Riders should spread out if no trail is present to minimize impact of horses on vegetation.

Section 7-34

Instruction

- Participants must be taught proper conduct around horses, e.g., letting them know where you are, not making sudden movements (e.g., if taking a jacket off, do so slowly and carefully) or loud noises, treating them gently and respectfully.
- Horseback riding involves placing the body through a range of motion not commonly experienced. Participants will benefit from a warm-up and stretch before participating to avoid injury and residual soreness.
- Participants should be instructed in basic riding skills where such instruction will support safe participation in the riding activity and environment selected. Skills taught may include:
 - appropriate mounting procedures and body position in the saddle;
 - developing a secure position;
 - appropriate rein length for effect and to prevent abuse; and
 - use of voice commands, legs and hands, and aids.
- Participants must be taught how to maintain control at a walk before progressing to a trot, and at a trot before a canter. Only very well trained participants may be allowed to gallop on a horse.
- If relevant to the terrain, participants should be taught how to ride up and down inclines and when to walk for the safety of themselves and/or their mounts.
- Participants should be informed about hazards encountered and how to handle these (e.g., stream crossings, fallen trees).
- Participants should be taught appropriate spacing between animals.
- For daytrip or longer outings, instruction in safety procedures should include procedures in case of emergencies (e.g., runaway horse, emergency dismounts).
- Participants should be taught what to do when meeting other groups (e.g., riders, hikers, mountain bikers).
- Instructors/supervisors should appreciate that some participants may have a very real fear of horses. Such fears should be treated sensitively and participants should not be forced to participate if they are too uncomfortable.

Supervision

- On-site supervision during instruction.
- In-the-area supervision after initial instruction and when out on trails.
- Ratio as per calculation, including consideration of risks associated with height off ground and potential unpredictability of animals in the hand of novices. When trail riding, two supervisors is considered a minimum, with one leading and one sweeping.



Horseback Tripping Overnight/Extended

Equipment/Location

- The service provider will ensure that an appropriate area is available to overnight the horses and that they have sufficient water and feed.
- Ensure that participants are provided/bring and wear protective helmets whenever on or near the horses; including riding, leading, saddling, feeding, or grooming.

Instruction

- Recognize the significant leg and groin discomfort participants may experience following an extended time in the saddle. Encourage participants to walk occasionally to stretch their legs and keep the initial travel days of an extended trip short to give participants' bodies time to adjust.
- Take extra care at river crossings and on steep slopes, particularly with loaded animals.

Supervision

- In-the-area supervision.
- Ratio as per calculation.
- Use a lead and sweep, head counts and/or other appropriate system to keep the group together.

See [Base/Remote Camping](#), and [Day Hiking and Backpacking](#).

Section 7–36

Solos

Overnight/Extended

Age 14+

In the loosest interpretation of the word, solos can involve having a group spread out in the woods around the leader for a 10-15-minute quiet sit, as an opportunity to stop, look and listen to nature. At the other end of the continuum, solos can involve having small numbers of mature, experienced participants do an overnight or longer stay in the forest, each in a separate solo site. Properly constructed, such experiences allow participants to learn that they can be safe, comfortable and content in nature.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Suffering an injury while alone on a route/trail or in solo camp;
- Injuries related to slips, trips, and/or falls;
- Injuries related to colliding with a fixed object (e.g., walking into a tree at night);
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia in cold or wet weather due to insufficient clothing;
- Loss of hand dexterity in cold or wet weather.
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Burns or scalds related to use of fires, camp stoves and/or the handling of hot food or liquid;
- Cuts related to the use of knives, axes or saws;
- Illness related to poor personal hygiene, failure to purify drinking water, or failure to sanitize dishes;



- Injuries related to encounters with animals and plants in the environment;
- Allergic reactions to natural substances in the environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety related to feeling alone/isolated, the dark, wildlife, etc.;
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Leader Readiness

- The leader must be competent to organize the soloing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. Strong wilderness living skills and basic search and rescue skills are required.

Equipment/Location

- All participants and supervisors must carry a whistle/noisemaker.
- There is a commonly known and recognizable boundary for the soloing area and each site within it and all participants and leaders are familiar with and adhere to these.
- The proposed area must be carefully investigated prior to the activity, considering the need for enough sites that are all visually ‘private’, but within whistle range of a supervisor and/or two or more other participants.
- A sketch map of the location of each solo site is beneficial.
- Participants may be asked to keep a light-stick or other easily visible marker above or near their shelter at night to facilitate night checks by supervisors.
- The equipment participants have will vary by the duration and objectives of the activity and participant competence with the equipment (e.g., stoves, saws).
- If participants will be soloing along or securing water from a fast moving river or other potentially hazardous watercourse, they may be required to wear a PFD when close to the water (e.g., filling their pot).

Instruction

- Only participants with strong camping experience (minimum 10 nights out over last two years) and solid relevant camping skills should be allowed to participate in an overnight solo.
- Solos should involve challenge by choice and participants who are not comfortable should be offered options (e.g., staying in pairs).
- Participants must know the whistle signals for “attention”, “I’m coming to you”, and “help/emergency” and what to do when hearing these signals.
- Participants who are to go on solos must be given the information and skills to be safe, including but not limited to:
 - logistics,

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- knowledge of self-sustaining skills, as relevant (e.g., shelter-building),
- what to do in case of significant changes in the weather,
- psychological preparation, and
- emergency procedures.
- Very clear rules about the use of fires should be given. If they are appropriate for the conditions (low fire hazard and abundant fuel) and group (mature and capable), then they may be permissible. Limits on the size of fires should be given and safe fire sites selected.
- Participants are informed not to participate in activities like hiking, swimming, climbing, hunting or trapping, etc. during solo.
- Warn participants not to wander or visit other members during the solo.
- Tell participants what to do if an unfamiliar person enters their solo site (e.g., avoid engaging in conversation; if uncomfortable, call or whistle for supervisor or other nearby participants).
- Tell participants how to contact the instructor if they need to talk to them (e.g., hang a towel on a designated tree).
- A system is in place to administer medications or do food drop offs, if necessary.
- Participants are placed at appropriate distances from each other. Participants needing special attention, such as those with health concerns, lower maturity level, and/or unfamiliarity with wildland environments should be placed closer to the leader's campsite.
- Solo sites are mapped out and participants are aware of who and where their neighbors are (to help preserve privacy and for emergency situations).
- Participants know the role and responsibilities of staff during the solo experience, which may include, but not be limited to:
 - the check-in system,
 - food provisions,
 - emergency plans and leadership,
 - whether or not (or when) to visually observe participants, and
 - how participants will be approached by supervisors, if necessary, during the solo.

Supervision

- In-the-area supervision.
- Ratio as per calculation.
- Ensure parents/guardians are informed and consent to the solo activity.
- Pay particular attention to gender issues (e.g., have two supervisors do site visits together, with at least one a female if any of the participants are female).
- Group size for overnight solos should be a maximum of about ten participants.
- Conduct regular checks (at least twice daily); visual sighting is often sufficient to confirm that all is well with a participant.

See **Base/Remote Camping**, and **Hiking and Backpacking** for other considerations.



Wilderness Steambaths

Age 9+

The wilderness steambath experience resembles the manner in which many native Canadian peoples cleansed their bodies. The steambath also had cultural and spiritual importance to many first nations peoples. In the recreation program setting, preparation for the activity typically involves building a willow (or other flexible frame) arch shelter which is then covered with tarps or parachute material, heating rocks or iron railway tie plates in a hot fire, and placing one or more rocks/plates in a hole dug in one end of the shelter. Interested participants sit inside the shelter with the entrance closed and one sprinkles water on the rocks/plates to create steam. When feeling adequately hot and sweaty, participants emerge from the steambath. The steambathing activity is often followed immediately by a cold water rinse (e.g., bucket full of water over the head and body, plunge in lake or river, or roll in snow). Most participants find the experience very exhilarating.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks - all of camping, plus:

- Injuries related to slips, trips, and falls in the program area or en-route to/from it (may be contributed to by participant feeling light-headed after steaming and standing up);
- Injuries related to colliding with a fixed object (e.g., walking into a tree at night as the activity is frequently done in the evening);
- Injuries related to the physical demands of the activity (e.g., heat intolerance);
- Hyperthermia (e.g., heat exhaustion, heat stroke) due to insufficient hydration and/or failing to exit the steambath soon enough;
- Injury related to equipment (malfunction, failure to use the equipment properly, or becoming tangled in apparatus such as the shelter tarp);
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Burns related to use of fires, and/or hot rocks/plates (e.g., hot rocks may fracture or even explode if not selected appropriately);
- Lung and/or throat irritation due to ash or other material coming in contact with the hot rocks/plates in the steambath and creating smoke;

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- Scalds related to the pouring of excessive amounts of water on hot rocks/plates in the steambath;
- Cuts related to the use of knives, axes or saws (e.g., preparing fire) or to the feet if walking around barefoot;
- Drowning or near drowning during dip or plunge in water after steambath;
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee stings) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Leader Readiness

- The leader must be competent to organize the soloing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- The group must have immediate access on-site to first aid and CPR support. CPR B is recommended if participants are under age 8.

If participants are to dip/plunge into water above chest height:

- A designated lifeguard or lifesaver (e.g., Bronze Medallion) must be present. The lifesaver should be a minimum of 16 year of age and at least two years older than the participants being supervised.
- Lifesavers require significant knowledge specific to the activity and the aquatic context. At least one lifesaver must have an understanding of site assessment, supervision, safety and emergency procedure considerations relevant to the selected site and should have a minimum of 10 hours experience supervising in the type of environment (e.g., open water).
- The Lifesaver must be knowledgeable and skilled in relevant incident prevention (e.g., site assessment, supervision, safety rules) and incident response (e.g., water rescue skills, emergency procedures).
- Parents/guardians must:
 - be notified of the supervisory arrangements (e.g., the number and level of certification of the Lifesaver(s) present, distinguishing them from ‘Lifeguards’ unless the individual(s) are currently certified as lifeguards),
 - identify their child’s aquatic skill level,
 - acknowledge awareness of the potential hazards associated with the plunge/ swimming activity, and
 - consent to their child/ward’s participation.



Equipment/Location

- Consider how participants are to cool off after the steambath and if they are to dip/plunge in open water (e.g., lake or river), then an appropriate site must be selected. It does not have to be deep (e.g., a half-meter to lay down in for a few seconds is often adequate), but may also be deep if it is relatively still water. Once identified, this dip/plunge site may ultimately determine where the shelter and fire are constructed (minimizing distance to walk and cool off between steambath and dip/plunge).
- Consider the distance between fire and steambath (minimum distance to carry hot rocks/plates, but far enough that sparks from fire don't land on the shelter).
- Apply fire safety procedures (see **Camping**).
- The size of the fire needed depends on the size of the group participating in the steambathing activity, number of rounds in the steambath they wish to do, and how hot they like it in the steambath. With younger and/or less experienced participants, err on the side of only one or two rounds without very much heat. However, it will frequently still take at least an hour or more to sufficiently heat the rocks/plates for steambath use.
- If rocks are to be used, avoid river rocks or other types potentially prone to exploding.
- Establish a perimeter of at least 3m (10 feet) around the fire while rocks are heating that no one except a supervisor enters and then only to tend the fire or remove rocks to place in the steambath. This is not necessary if railway tie plates are used as they do not explode. When the steambathing experience is over and any remaining rocks in the fire have begun to cool, participants may stand around the fire to dry off and stay warm.
- Consider a safe means of transporting hot rocks/plates from the fire to the steambath. This involves getting the rocks/plates out of the fire, getting wood and ash off of them, safely lifting and transporting them on a shovel or between large sticks, and ensuring the shelter material is moved so the hole is exposed properly before depositing them and weighing down the tarp away from the rocks/plates). This is typically a two-person job and communication is important. Footwear must be worn if involved in transporting rocks/plates and work gloves are recommended.
- Consider nature of footing when determining whether to require the wearing of footwear during any dip/plunge activity.
- Consider if there is a need to run a hand line to a dip site.
- Consider whether lights/lanterns are needed to light route and dip/plunge site.
- If a plunge into water over chest height is involved, ensure foot first entry and slipping in vs. jumping unless the site is consistently more than 2.5m deep. The site must be inspected during daylight and assessed for its safety and appropriateness.
- Any participants who are non or weak swimmers must wear a PFD prior to plunging in over chest depth or where there is more than a very modest current in shallower water.
- The door or entry must be opposite the site of the hole to minimize potential for anyone to slip or trip or otherwise come in direct contact with the hot rocks/plates.
- In the steambath, a bucket/pail of water is kept for the purpose of sprinkling on the hot rocks/plates. The bucket should be kept at least 1m (3 feet) from the rocks/plates and an

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adult should sit in the first spot next to the hole and assume responsibility for sprinkling the rocks/plates. A ladle or bough bundle is used to take a small amount of water at a time from the bucket to sprinkle over the rocks/plates. The temperature in the steambath can rise dramatically in a very short period of time if too much water is poured on the rocks/ties at once.

Instruction

- Participants must be instructed to stay well out of the way when rocks/plates are being transported to and placed in the steambath.
- The adult supervisor in the steambath monitors the participants' comfort level during the session. If the steambath structure is large, there may be significantly varying levels of heat/steam in different parts. However, once the bucket is in the structure, participant movement around within should be minimized.
- Participants must be made aware that they are each free to leave the steambath at any time, regardless of whether this action allows any heat/steam to escape the steambath, as long as they notify the supervisor. Another supervisor needs to remain outside of the structure to supervise any early departing participants.
- Instruct participants carefully regarding the procedure for exiting the steambath, making their way to the site of any related dip/plunge activity, and the boundaries and expectations of participants during the dip/plunge.
- If the swimming ability of a participant is unknown, before being permitted to plunge/swim in water above their chest height without a PFD the participant should be given a **survival swim test** (roll in, tread 1 min., swim 50 m. any style without PFD or goggles) or **endurance swim test** (50 m. swim any style). The selected test will generally be conducted by the lifesaver or may be conducted by another leader as long as it is undertaken in shallow water only and with little or no current present.
- Encourage participants to keep any dip/plunge activity brief if the water is cold, especially if they do not intend to return for another round in the steambath, and to get warm and dry following any dip/plunge activity.
- If the activity is being conducted in the evening, encourage participants with long hair to consider keeping their hair dry when dipping/ plunging or dousing with a bucket.

Supervision

- On-site supervision, recognizing that not all participants will always be visible in the steamy shelter, especially if an evening activity. Audio check-ins are encouraged in these circumstances.
- At least one supervisor inside and one outside the steambath whenever participants are inside.
- Ratio as per calculation.
- Employ a buddy system, both during the sweat and during any dip/plunge activity.
- See **Aquatics** for guidelines related to supervising a dip or plunge activity, particularly if water is or may be above chest height, or if using a river or fast moving creek.



All Terrain Vehicle Riding • Trail Biking

Activity Instruction	Age 10+
Day Tripping (< 3 hours)	Age 11+
Day Tripping (> 3 hours)	Age 12+
Overnight Tripping	Age 14+

There are more ATVs per capita in Canada than anywhere in the world. ATVs are the third leading cause of recreation and sport related injuries to children and youth between ages 5 and 19, behind only cycling and snowmobiling. While highly motivated to driving motorized apparatus, young people tend to be under-equipped physically and psychologically to operate the machines.

While many youth-serving organizations refrain from participating in motorized activities, in many parts of the province, these activities are common. Recognizing the popularity of these activities, some youth-serving organizations may wish to take the opportunity to help instruct and model safe practise to youth in the community.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to motor vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it;
- Injuries related to rollovers, falling off the machine or being thrown from the machine (e.g., due to speed, cornering, rough or steep terrain);
- Injuries related to colliding with a moving object (e.g., another ATV or trail bike) or with a fixed object (e.g., a tree, branch);
- Injuries related to ill-fitting equipment, equipment malfunction, or failure to use the equipment properly;
- Injury or delays caused by mechanical breakdown;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;

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- Hypothermia due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., heat exhaustion, heat stroke) due to insufficient hydration, overdressing, and/or overexertion in a hot environment;
- Injuries related to encounters with animals in the environment;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee or wasp stings);
- Psychological injury due to anxiety or embarrassment (e.g., re: body size or shape, lack of fitness and/or skill);
- Illness related to poor hygiene;
- Complications of an injury or illness due to remoteness and time to emergency services: and
- Other risks normally associated with the activity and environment.

Safety Equipment: flashlight, candles, Fox 40 whistle, tool kit, pocket knife, first aid kit, strobe, radio or cell phone for communications, high energy food/drinks, tow rope, waterproof matches, flares, extra batteries, extra key, axe and saw, reflective mirror, thermal blanket, florescent tape, spark drive belt and spark plugs, map and compass, extra socks, metal cup or pot, shovel, 20 meters 10 mm nylon rope, emergency shelter, sleeping bag, litter bags, and plenty of fuel.

Tool Kit: screwdrivers, locking pliers, wrenches, rags, electrical/duct tape, starter cord, spark plugs, spark plug socket, drive belt.

ATV • Trail Biking Activity Instruction

Leader Readiness

- The instructor/leader must be competent to organize the ATV/trail bike riding activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The larger the area and/or longer the riding activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- The leaders must be aware of and respect ATV and trail bike related legislation in the province, as it relates to the riding activity and environment.
- All leaders and accompanying supervisors should be comfortable on the type of ATV/ trail bike and in the environment selected.
- The leaders should be very cognizant of their own riding habits and consciously work to be good role models (e.g., wear helmets, use signals consistently, avoid sensitive terrain).
- If going off-site more than 3 km, at least one leader should have some skill in basic repair and maintenance of the type of machines used.
- Training may be secured through the Canada Safety Council.
- At least one supervisor should have first aid training, the level dependant upon the time/ distance from professional first responders (refer to **First Aid** in **Section 3**).



Equipment/Location

Planning for riding is an important factor in making a successful adventure, whether for the afternoon, day or camping overnight. Because the mode of transportation is mechanical and significant distances can be covered in a relatively short period of time, always go prepared to stay overnight despite good intentions.

- If personal machine, parents/guardians can be tasked with checking or having a mechanic check the ATV/trail bike prior to participant using it in the activity to ensure it is in good working order (e.g., tires (condition and pressure), controls, electronics, brakes, lights, oil and fuel, chassis).
- Registration and license plate, insurance documents on board.
- Safety equipment checked and aboard.
- Tool kit checked and aboard.
- First aid kit checked and aboard.
- Parents/guardians are responsible for outfitting their child/ward with correctly fitting appropriate helmets for ATV/trail biking activities, unless the youth-serving organization has assumed this responsibility. Helmets significantly reduce head injuries and are required by law for all minors in Alberta. Leaders must **STRONGLY ENCOURAGE** their use.
- Leaders should check that participants' helmet straps are properly adjusted and buckled and require participants to keep them on at all times while riding.
- Eye protection is important.
- Gloves are important for protection in a fall and from cold and/or wet weather.
- Use solid, stable footwear; e.g., boots.
- Clothing worn should be comfortable and weather appropriate. The arms and legs should be covered. Light or bright coloured or reflective clothing and helmets are more visible.
- No earphones or cell phones while riding.
- Refrain from using after-market pipes that increase noise and annoy others.
- ATVs and trail bikes have improved considerably due to oil injection, sound reduction measures, variable height exhaust valves, direct injection, on-board computers and 4 –stroke engines, encourage youth to embrace new technology which is environmentally friendlier.
- Select on-site instruction stations carefully in terms of natural boundaries (or set out pylons or other indicators). Consider ground surface and pedestrian or other traffic.
- Instruction of novice participants should be at a well-controlled site or route; avoid roads shared with motor vehicle traffic.
- Laws governing the operation of ATVs and trail bikes differ for private and public property. Ensure that youth are aware of and abide by them.
- In Alberta on public lands youth of 14 years or older may operate an ATV or trail bike independently; those younger than 14 must be accompanied by an adult.
- On private property, where permission has been granted by the owner, there is no license, registration, insurance or age requirement.

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Instruction

- The relevant rules of the *Motor Vehicle Act* and *Traffic Safety Act* must be adhered to if going on roadways, including group riding protocol.
- Instruction may include, if/as relevant to the ATV / trail bike activity and group:
 - clothing and footwear for riding,
 - familiarizing to the machine,
 - basic machine checks (as described above),
 - how to position oneself on the machine and how to shift one's weight during basic manoeuvres,
 - rules of the trail; reading and obeying trail signs,
 - staying alert (inattention causes accidents),
 - how to signal (e.g., hand signals) and carry out turns safely,
 - how to maneuver the machine (e.g., accelerating and decelerating, riding up and down hills, cornering)
 - anticipating and responding terrain features; e.g., slippery sections, slopes, ditches, depressions, blind intersections like corners of buildings or heavily treed bush, wet surfaces, standing water, loose gravel, rocks, ruts etc.),
 - riding single file, leaving enough space to be able to dodge obstacles without endangering others,
 - signaling obstacles and traffic for those behind,
 - dealing with wet riding surfaces,
 - riding on designated trails and not on roadways,
 - passing others safely,
 - riding in a predictable manner; looking around before swerving, turning or changing lanes and signaling where appropriate,
 - staying alert and focused,
 - handling minor equipment problems,
 - efficient driving technique,
 - handling gusting headwinds and crosswinds,
 - avoid traveling over ice or snow,
 - basic machine maintenance (e.g., cleaning) and repair (e.g., changing a tire), and
 - how to fall off a trail bike/put the bike down safely.
- Instruct youth progressively (e.g., how to stop before how to start, riding slowly but correctly).
- With inexperienced riders, an initial riding pretest (safety emphasized) may be given before leaving the start area (e.g., starts, stops, turns, signals, communications).
- Encourage youth to know their abilities and skill level.
- Youth should not ride with a passenger, especially another child.
- Exercise common sense, ride with care and caution at safe, reasonable speeds. Riding an ATV or trail bike is not like being in a car; there are no frames, seatbelts or airbags to protect the rider.



- Encourage youth to make eye contact with drivers they meet and assume that they have not been seen until acknowledged.
- Be respectful of other riders; e.g., safe following distances, yield as appropriate at intersections, yield to those coming uphill).
- Be respectful of the environment, and of private and public property, and don't litter.
- Be respectful of wild and domestic animals and give them their space.
- Avoid riding in environmentally sensitive or protected areas.
- As with other sports a code of Ethics, Code of Conduct or Riders Pledge should be in use by all participants to encourage safe responsible riding practices.
- Racing should generally not be done, except where participants have been trained how to race and demonstrated they can race safely and an appropriate site is used.
- Avoid alcohol and drugs before and during the ride. Youth should be aware that many deaths and permanent disabilities have happened while riding on ATVs / trail bikes when someone's judgement has been compromised in this way.

Supervision

- In-the-area supervision.
- Ratio as per calculation if off-site (See **Section 3**).
- A designated leader stays at the front of the pack to set an appropriate pace, and the sweep stays at the back of the pack. If there is a change in road/trail direction, the leader should ensure no one misses the turn.

See Alberta 4H for CD course on ATV Safety at www.4h.ab.ca

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ATV • Trail Bike Day Trip: *all of Activity Instruction, plus:*

Equipment/Facilities

- If going off-site, choose routes carefully in terms of the length, grade, road/trail surfaces (paved, gravel, dirt), and consider the presence/frequency of traffic, complex intersections, and/or other hazards.
- Prior to initial use of an unfamiliar route, leader or designate pre-travel the route or seek other reliable information to secure an estimate of the time needed, road or trail conditions, hazards present, and appropriateness for the group.
- Be particularly conservative regarding distance and time estimates when a mechanical breakdown, pending darkness or other problem may affect success and safety. Trips can cover substantial distance, so it is easy to be quite far from home base.
- Avoid riding off-site at night. If riding at dusk, reflective strips on the machine frame, clothing, use of a headlight, a red taillight and/or red reflectors on the rear of the machine increase visibility.
- Riders need a good layer(s) of clothing for wind protection if it is cool out; riders lose heat through convection (air moving past body carries body heat away).
- The first aid kit should include large gauze pads and bandages to cover major road rash.
- If it is necessary to transport ATVs / trail bikes (other than parents/guardians bringing them to the site), select an appropriate mode of transport for the machines (e.g., trailers). Check any trailers used for loose bolts and ensure lights are functioning.

Instruction

- If sharing the trail with other recreational users (e.g., walkers/joggers, hikers, horse riders), ensure that riders are familiar with protocols for safety and courtesy (e.g., ride under control and at slow speed; make verbal contact, especially if coming up behind someone; wait for an appropriate acknowledgement and time to pass safely).
- Instruct participants to get themselves and all of their gear well off the road or trail when resting, having lunch, or stopping for any other reason.
- Because of convection effects, riders may dehydrate more quickly than hikers or others working at the same intensity. Participants should be encouraged to carry water, and to drink often (e.g., give reminders at break stops and model by drinking frequently).

Supervision

- In-the-area supervision generally.
- Constant visual supervision if participants are dealing individually with a specific significant hazard encountered on the road or trail (e.g., riding near a water margin).
- Ratio as per calculation (See **Section 3**).
- Lead and sweep supervisors should carry communication equipment (e.g., walkie-talkies, FRS, cell phones) to facilitate communication between them, or create a relay system to pass messages up and back.



Special Events

Special events involve activities, celebrations, performances, presentations and/or other occasions that fall outside the scope of normal programs and operations of an organization. There are many ways such events can contribute to the organization achieving its mission, raising its profile in the community, and raising funds. An organization may be the primary event provider or may simply contribute as a sponsor.

Events are of value or import to the organization but, where conducted, they must be undertaken with a high priority on safety, loss prevention and cost-effectiveness. Because of the more unique nature of special events, there are potential safety and security risks involved. Each must be appropriately planned for.

Prior to reviewing elements of this subsection for the purpose of planning special event, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections I (Introduction) and II (Risk Management Primer) of the Level I Manual.*
- I have a solid understanding of all the material in Section III (General Considerations for Youth Activities), and any subsections in Sections IV (Special Considerations) and V (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of any relevant material in Section VI (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- the likelihood that some people involved in helping stage the event will have minimal experience in their roles;
- bringing a relatively large group together in a relatively small space (e.g., parking, crowd control, security, emergency procedures);
- installing and using temporary structures and/or other risks related to management or occupancy of premises (e.g., occupancy limits, property protection, utilities);
- transportation (to, from and/or during event);
- lifting and handling heavy equipment or apparatus;
- participant safety (e.g., involvement of people in physical activities, sports or games, including potentially higher care activities);
- the involvement of participants, including minors, that are not familiar to the organization (e.g., securing medical and health information and consents where appropriate);
- set-up of and participant involvement in novel experiences such as rides, mechanical devices, inflatables, petting zoos/animals, etc.;
- presentation of fireworks/pyrotechnics;

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- environmental impacts (affects on air, land or water); presence/use of any hazardous materials; containment of human waste and garbage;
- entertainers/musicians/performers (e.g., electrical, potential complaints from excessive noise);
- spectator safety (e.g., at a sporting event, performance);
- weather (e.g., extreme heat or cold; wind; precipitation);
- serving or allowing the consumption of alcohol;
- food services and/or other vendors at the site;
- accessibility or accommodation issues (e.g., wheelchairs);
- gambling/gaming;
- first aid and emergency response;
- communications with other organizations and offices (e.g., securing permits and licenses, emergency responders, media);
- financial risks, (e.g., containing costs, managing cash at site, cost if adverse weather or other factors affect projected attendance or cause cancellation);
- good will or reputation risks if the event is unsuccessful; and/or
- other risks relevant to the particular event, activities, location/environment and people present.

Leader Readiness

- ensure event manager has sufficient ability and experience to organize and coordinate the many others who will be involved; and
- those involved in organizing, directing and leading various aspects of the event must be able to perform their job functions (i.e., recruited, selected, oriented, trained, and supervised as appropriate).

Equipment/Location

- develop an overall plan and draw up a site map illustrating all permanent and temporary structures (e.g., buildings, tents, vendors, permanent or portable washrooms, fences, seating, emergency vehicle access), participant flow patterns, entries/exits, and first aid stations. Consider time sequencing (how many people will be where, when);

Event Management

- develop a risk management plan, approach or strategy to control losses (related to any of the risks noted above) by minimizing the likelihood and severity of incidents (e.g., staff/volunteer selection, training and management, instruction of participants; supervision of participants; communications equipment and protocols, emergency response plan; signage with locations of nearest emergency exit(s), first aid station, security/lost children/lost and found office);
- develop a security plan that considers the level of security needed at various times and places pre/during/post event, the use of identifiable security personnel, and/or video surveillance, use of photo ID badges for staff/volunteers/media, etc.;



- provide for informed consent (e.g., parental/guardian acknowledgement of risk and consent for minors; signage, written materials (e.g., in registration package) and/or other means of informing staff, volunteers, participants and/or spectators about the risks);
- subcontract responsibility to one or more organizations/service providers that can better manage all or some of the risk (e.g., a security company to handle crowd control and/or event security); and
- develop a process for securing feedback on the event from those within the organization or otherwise involved; such inputs may help enhance the safety and success of other offerings of the same or other special events.

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B. WATER-BASED ACTIVITIES



Aquatics

Swimming Pool (Hotel, Backyard)	Age 6+
Open Water (Lake, Ocean or River)	Age 8+
Remote Context Open Water	Age 12+

Many sport and recreation groups find themselves with opportunities to take advantage of one or more aquatic environments that differ from traditional public swimming. Some examples may include:

- swimming in a member's backyard or apartment pool;
- swimming in a hotel pool while on a band trip, ski trip, sports team trip, etc.;
- swimming at an unguarded beach close to the municipality;
- swimming in the river at the end of the day while on a canoe trip; or
- the above or any other aquatic context that relies upon lifesavers and other supervisory systems versus certified, qualified Lifeguards (NLS) to support the group.

While few would argue that it would be ideal, whenever children will be in the water without PFDs on, to have them supervised by a fully certified and qualified Lifeguard (National Lifeguard Service (NLS), age 16 or older, Standard First Aid or above, including CPR). However, it is simply not achievable or feasible to have Lifeguards present in all swimming contexts, particularly for incidental swimming activities. Recognizing the potential loss of some level of aquatic-specific supervision, incident prevention, and aquatic rescue and emergency response capacity whenever a qualified Lifeguard is not present at a swimming activity, the context here regards these activities as higher care. The following guidelines are provided to help structure the experience to promote informed consent and safe and successful outcomes.

An activity that involves swimming in a river, lake or ocean at a site that is not designated swimming area, must be treated as a higher care activity, regardless of whether there are Lifeguards and/or Lifesavers supervising the activity.

These guidelines apply to all aquatic contexts except those covered in Section 5 (i.e., swimming activities at designated public venues (e.g., municipal or 'Y' pools, waterparks) with certified Lifeguards supervising the activity). It builds on rather than repeating the content from Section 5.

Section 7-54

General Considerations for all Higher Care Aquatics Activities

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning (especially the section on Aquatics).*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following additional guidelines:

Known Potential Risks

- Injuries related to stepping on sharp objects with bare feet;
- Injuries if swimming in moving water environments due to foot entrapment in bottom hazards such as rocks or submerged branches;
- Environmental hazards such as murky water, wind, waves, currents, etc. depending on the specific site used;
- Complications of injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with the activity and environment.

Note: Some of these risks will not or may not be present in indoor sites (e.g., hypothermia).

Leader Readiness

- The leader must be competent to organize the swimming activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary, or to otherwise provide for any or all of these capacities (e.g., using a service provider, Lifeguard or Lifesaver).
- A designated NLS Lifeguard or Lifesaver (e.g., Bronze Medallion, 16 years of age, and CPR A). CPR B or C is recommended if participants are under age 8. The Lifesaver should be a minimum of 16 year of age and at least two years older than the participants being supervised.
- Lifeguards or Lifesavers require significant knowledge specific to the activity and the aquatic context. At least one Lifeguard or Lifesaver must have an understanding of site assessment, supervision, safety and emergency procedure considerations relevant to the environment of choice (e.g., pool, water park, or waterfront) and should have a minimum of 10 hours experience supervising in that environment.
- The Lifeguard or Lifesaver must be knowledgeable and skilled in relevant incident prevention (e.g., site assessment, supervision, safety rules) and incident response (e.g., water rescue skills, emergency procedures).



- Any leader who may be required to enter deep water as part of the event participation or to assist with a rescue should be able to achieve the swim to survive standard (while wearing a PFD if necessary) (i.e., roll into deep water, tread water for one minute, and swim 50 m using any swimming method without wearing goggles);
- Parents/guardians must:
 - be notified of the supervisory arrangements (e.g., the number and level of certification of the Lifeguards or Lifesaver(s) present. Take care not to use the term ‘Lifeguard’ unless the individual(s) are currently certified and qualified Lifeguards; specifically clarify when there is not a Lifeguard present so parents/guardians are aware;
 - identify their child/ward’s aquatic skill level,
 - acknowledge awareness of the potential hazards associated with the swimming/wading activity, and
 - consent to their child/ward’s participation.

Equipment/Location: all of Section 5 plus:

- Persons assuming Lifeguard or Lifesaver responsibilities should be clearly visible and identifiable.
- Participants must not dive head first from the pool edge (or other similar surface close to the water level), unless the water at that point has a minimum depth of at least 2.5 m. It is the venue manager’s responsibility to ensure diving tank depth is in compliance with standards if divers are entering from an established diving board or platform. It is the Lifeguard or Lifesaver’s responsibility to assess the safety of any other site to be used for jumping or diving into a natural body of water (e.g., off a riverbank, off a rock shelf into a lake).

Instruction: all of Section 5 plus:

- Where a particular off-site experience involves a water-based activity (e.g., swimming, canoeing), parents/guardians should be asked to verify the participant’s level of swimming training/skill.
- Before being permitted to swim in water above their chest height without a PFD the participants must be given a **survival swim** (i.e., swim to survive) or **endurance test**. The selected test will generally be conducted by the Lifeguard or Lifesaver or may be conducted by another leader as long as it is undertaken in a safe location (e.g., in shallow water only, along the edge of a pool).
- All rules and regulations of the swimming area, diving area, swing ropes, pool slides, waterslides, hot tubs, change rooms and/or other related facilities in the aquatic must be presented to the participants and followed. Most often this rule review will be provided by the Lifeguard or Lifesaver.
- No swimming after dark
- No distance swims in open water except where this is part of a specific planned swimming or triathlon program and informed parental/guardian consent has been secured. Appropriate rescue craft must be provided.

Section 7–56

Supervision

- A certified Lifeguard or Lifesaver to supervise the aquatic environment and group. In determining the number of Lifeguards and/or Lifesavers needed, consider the size and configuration of the environment (e.g., number of pools, sight lines); group size, participant age, and swimming ability. Those serving as Lifeguards or Lifesavers must have:
 - CPR (any level, except if those to be supervised are under age 8, where Level B is recommended as a minimum). Standard level first aid training is also recommended;
 - Be trained in the facility operating and emergency procedures, or be able to develop appropriate safety and emergency plans for a site to be used for an incidental swimming activity.
- At least one leader/supervisor must remain free to handle needs and discipline of individual participants.
- The Lifeguard or Lifesaver(s) and supervisors should be free of all other duties when supervising the aquatic activity.
- Supervisors not trained in aquatic rescue should not personally enter deep water to render assistance to an age 8 or older participant in difficulty. Their job in these cases, and which they need to be clear about through a briefing by the Lifeguard or Lifesaver and/or a leader, is to serve as extra sets of eyes and to summon the Lifeguard or Lifesaver to render assistance to a participant in distress. In all cases, a reaching assist (e.g., hooked pole, flutter board, canoe paddle) should be extended to a swimmer in difficulty; body contact should be avoided except with very small children who may not respond to a reaching assist.
- Employ a buddy system.

Open Water Swimming

- Swimming, wading or other aquatic activities should not be allowed as an impromptu activity for which there is no safety or emergency plan and for which the parents/guardians and Program Manager or designate have not approved. Plan ahead or don't do it!
- Avoid crowded beaches where it is more difficult to see participants;
- Know the environment or seek competent local advice (e.g., drop-offs, currents, bottom surface, water clarity, effect of wind);
- Establish boundaries for the activity (demarcated with buoys, buoy lines or landmarks) and ensure participants are aware of these;
- Ensure leader competencies, Lifeguard or Lifesaver and supervisory ratios and considerations can be met based on the nature of the environment, as described above;
- Learning to swim in moving water while wearing a PFD is an important skill relevant to developing confidence and competence in river-based paddlesports. However, swimming in moving rivers or streams should only be undertaken if the lifesaver or lifeguard assesses the conditions and group and deems them sufficiently safe to proceed. Such assessment includes:



- the leaders and participants are all reasonably competent swimmers (i.e., based on swim level attained or successful survival swim or endurance test);
 - they are wearing PFDs;
 - there are no significant downstream hazards (e.g., rapids, sweepers, log jams) evident;
 - the participants have been instructed re: appropriate swimming technique for the environment (e.g., if in moving water, keeping feet up near surface to avoid foot entrapment, swimming up onto strainers);
 - there is a slow section downstream where participants can easily make their way to shore; and
 - water rescue back-ups are in place (e.g., throwbag, rescue boat).
- Where cool weather and/or water may contribute to hypothermia, establish a system for monitoring this (e.g., participant awareness of potential, buddies watching each other for shivering, blue lips, loss of coordination).

Section 7–58

General Considerations for Paddlesports

Alberta offers some of the finest paddling opportunities in the world. Exploring the province, and/or other parts of Canada by small craft (canoe, voyageur canoe, kayak, raft, etc.) is a tremendous way to learn about and come to appreciate, understand and care about our natural and cultural heritage. While there are unique inherent risks associated with water travel, these risks are largely manageable by adhering to the general and specific guidelines shared herein.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 4 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Following are general considerations for all paddlesport related activities.

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it;
- Injuries related to collisions with movable (e.g., other boats or paddles) or immovable (e.g., rock) objects;
- Injuries related to capsizing of craft or falling out of craft;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;
- Hypothermia due to remaining in cool/cold water too long or due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., overheating) due to insufficient hydration, overdressing and/or overexertion;
- Injuries related to equipment (poor fit, improper adjustment, malfunction, or becoming tangled in apparatus; e.g., foot snag in bailer cord);
- Injuries related to lifting, carrying, walking with, or putting down the craft and/or packs;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Motion sickness when on large wavy bodies of water (lakes, ocean);



- Drowning or near drowning;
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee stings or jelly fish stings in ocean) or food items;
- Injuries related to encounters with animals and plants in the environment;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness related to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Leader Readiness

- The instructor/leader must be competent to organize the boating activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the boating activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- If craft are to be transported by trailer to and from the water, the individual driving the tow vehicle must have sufficient experience and skill to manage these tasks safely.
- The instructor/leader and assistant leaders must be capable swimmers, able to manage themselves confidently in the water in the selected environment while wearing a PFD. At a minimum they should be able to successfully complete a survival swim test (roll into the water, tread 1 min., swim 50 m. any style while wearing a PFD and no goggles).
- Leaders should practice rescue until they are competent in the water temperatures and conditions that activities or trips will be undertaken.
- The leader must be comfortable and capable on and near the waters intended to paddle, whether pond, lake, river or ocean. Those competencies include but are not limited to: reading local winds and weather and making accurate short term forecasts; reading the water and navigating accurately in the area; executing rescues of self, and others; and using the communications system to engage in necessary communications.
- Those intending to lead on the ocean must understand: waves, tides, river outflows, currents and sandbanks, beach hazards, and how these affect water travel; reading of tide/ current tables and nautical charts; reading of warning signs and flags, and dealing with ships and wakes; relevant flora and fauna and how to minimize negative interactions with such.
- The instructor/leader or a designated other must be able to provide CPR.
- The leader should be familiar with Transport Canada regulations for the vessel(s) in use with regard to operator certification. Such certifications depend upon whether the craft in use is designated a commercial or pleasure craft. Refer to www.boatingsafety.gc.ca
- If the group is divided into two groups, then at least one supervisor in each group must have all of the above competencies, as relevant.
- All assistant instructors/leaders must be competent boaters, capable of supporting the group and effecting/helping effect appropriate rescues in the type of water anticipated.

Section 7–60

- Water temperature is a critical factor in risk level calculation. It is important that all leaders and participants are sufficiently prepared and skilled to get out of the water quickly (e.g. within 10 minutes). Cold water is debilitating. Most individuals have difficulty rescuing themselves out of frigid waters, let alone another person(s), and children are incapacitated far more quickly. Lakes and rivers in Alberta can be very cold, even in summer.

Equipment/Location

The following equipment suggestions meet or exceed the Transport Canada, Office of Boating Safety minimum standards and recommendations. Standards and regulations change periodically and it is **the responsibility of vessel operators to comply with current standards**. It would be prudent to consult the office or website for current information before planning any boating activities. Go to www.boatingsafety.gc.ca

- Craft should be checked for leaks, broken seats, etc. and paddles/oars for cracks and splinters.
- If transporting boats to and from usage site, ensure that they are properly secured on a trailer (with safety chain in place and functioning lights) or well-lashed on a secure rooftop carrier.
- Do not exceed the weight load or capacity for the craft used.
- Correct fitting, Transport Canada approved PFDs/life jackets, with whistle attached to each, must be worn properly and done up at all times by all participants while on/in the water.
- Leaders should each have a knife attached to their PFD in the event someone gets tangled in ropes or cords, sweepers, etc.
- There must be a bailing device in each craft (e.g., bailer in canoe, voyageur canoe or raft, sponge in kayak, bilge pump in sea kayak or any of the above craft).
- There must be a 15 m (minimum) length of buoyant rope attached to the craft or (preferably bagged, but at least coiled and held together with an elastic/bungee). It should be located within quick access.
- If on the ocean and/or if paddling anywhere at dawn or dusk, a watertight flashlight or navigation lights are required.
- On the ocean, a cellular phone is not a good substitute for a marine radio in an emergency as it does not alert other boats close to you that you are in distress and unlike VHF transmissions, cannot be followed back to your location by rescuers.
- An extra paddle per three canoes or kayaks/one spare per voyageur canoe or raft.
- Ensure the first aid kit is waterproofed.
- Open crossings of large bodies of water are discouraged; groups should generally be kept within 80 meters of a shoreline.
- If in a boat between 6 and 8 meters long that has potential to be more than one nautical mile from shore, carry a watertight flashlight/headlamp and DOT approved flares (Type A (parachute), B (red star shells) or C (hand flares)).



- A wetsuit, drysuit or appropriate clothing layers, including a dry change(s) (packed in waterproof bag/container) and good rain gear (tops and bottoms) should be worn or carried by all leaders and participants traveling in small craft. Wetsuits or drysuits should be considered when the combined air and water temperatures are less than 15° Celsius, if on a river rated at Grade 2 or above or on extended open water trips. Children have a larger surface area/volume ratio and smaller overall mass than adults and, therefore, are more susceptible to hypothermia.
- Appropriate lightweight and securely fastened footwear (e.g., runners, neoprene booties) should be worn to protect the feet from rocky river bottoms or on ocean trips where there are barnacles. Rubber boots are fine for flatwater paddling in all but kayaks.
- Glasses should be strapped/tied on.
- All leaders should have rescue throwbags or coiled ropes, fastened to the boat and be well versed in their use.
- Have adequate floatation or watertight bulkheads to prevent craft from filling and sinking.
- When selecting an appropriate teaching site/route for a boating activity, consider:
 - the temperature of air (including wind chills) and water,
 - length of time a participant(s) may spend in the water if a boat is upset,
 - rate at which the water is moving (if a river, stream, or ocean current),
 - ease of access to/egress from site or watercourse,
 - the time of flood/slack/and ebb tides and their level of change (if on the ocean) by consulting tide and current tables, and
 - the skill/experience level of the participants.
- Non-established waterfronts should be well researched before swimming or practicing rescues. Look for submerged branches, large rocks or other objects, swiftly moving water on bends in rivers, shallow water, etc.
- When selecting a river travel route, consider gradient and grade of the water (consult maps, guidebooks, local area officials, paddling associations and clubs, etc.).
- When selecting a river travel route subject to change in classification based on flow rate, consult the Alberta Environment website for current flow information at www3.gov.ab.ca/env/water/basins/BasinForm.cfm
- Consider potential implications if a watercourse is subject to sudden and/or significant fluctuations in volume (e.g., impact of dams, storms, diurnal, seasonal or tidal variations).
- On multi-day trips, consider impact of loaded boats (e.g., slower, less maneuverable) when selecting paddling routes.
- If overnighting, gear carried should be secured in the craft, with weight low and distributed side to side and bow to stern (as appropriate – e.g., generally leaving bow slightly higher).
- Consider the frequency/length and terrain (e.g., steep, potentially muddy) of any portages expected (impacting packing methods for hauling gear and timelines).

Section 7–62

- Postpone paddling if there are indications of dangerous weather (e.g., lightning, storm activity, high wave conditions, or a strong off-shore or very gusty wind - particularly on shallow lakes, wide rivers or the sea).
- A rescue craft should be on shore or in the water at a waterfront site while participants are out on the water, or there must be sufficient craft and instructors on the water to provide rescue.
- All paddling in diminished conditions should be done near shore unless doing so would increase risk (e.g., strong on-shore winds with a rocky shoreline).
- At the end of each trip, and upon changing watercourses, wash any mud, algae or plant fragments from boats, paddles and feet to avoid transmitting any plant or animal pest species to previously uninfected places.

Instruction

- Participants should be comfortable in the water. Because they are wearing PFDs/life jackets, it is not essential that they can all swim, but it may be physically and/or psychologically beneficial (e.g., reducing fear of falling in) to introduce them to/review survival swimming as relevant to their anticipated paddling situation (e.g., reorienting themselves after rolling in, treading 1 min. and swimming 50 meters, all while wearing a PFD and no goggles).
- Non or weak swimmers should be buddied with competent swimmers;
- Participants must be taught general procedures if their craft upsets. For example,
 - call for help,
 - attempt to hang onto paddle and craft (unless doing so places them in danger; e.g., being blown away from shore by off-shore wind, dangerous rapids downstream), and if in a current:
 - stay upstream of boat,
 - keep feet up at the surface (to avoid entrapment) and downstream of body (to fend off rocks or other obstructions),
 - watch for a rescue craft or throw rope coming or an eddy or slack water that they can use to work their way to shore, and
 - know to swim at and climb up on a strainer (log jam) that cannot be avoided.
- If lake, ocean or flatwater river paddling, participants may be taught skills such as re-entries in deep water, kayak rolls, changing places, etc. as appropriate.
- Participants must be taught general procedures if another craft upsets (e.g., signaling rest of group, rescuing people first, then craft and/or other gear).
- Tandem paddling participants should be taught to communicate with each other.
- Participants should be taught universal whistle signals and paddle signals (i.e., directional, emergency and group up), and the importance of passing back paddle signals.
- Warn participants not to drink untreated water from any lakes, rivers or streams.
- If in tandem or solo craft, groups should consist of a minimum of three craft and participants should be instructed regarding safe group size.



- If tripping, group gear should be distributed among the boats so the loss of one boat does not seriously compromise the ability of the group to continue (e.g., it's really hard to cook for the group without a pot).
- Youth program groups should not boat after dark and participants should understand why this is an unsafe practice.
- To the extent that it affects the ability of the participants to safely negotiate the waters they are boating, they should be taught how to read the water and how to identify hazards they are likely to encounter.
- If in doubt, get out and scout! While stopping a group and going to shore takes time, modeling of conservative travel is more important.
- Participants should be instructed as to how to behave while near marine or terrestrial animals (e.g., look but do not touch or feed).

Supervision

- On-site supervision of teaching area and in-the-area supervision on trips.
- Ratio as per calculation, with consideration of exposure to the inherent risks water presents. Consider the number and size of boats, potential to get spread out and hazards anticipated. Generally, for inland and/or protected waters, a ratio of one capable adult boater to 8 - 10 participants is considered minimum; one to 6 - 8 if participants are in solo canoes or kayaks. One or more additional leaders will be needed if the group is paddling on a large body of open water or on a river. See **Sea Kayaking** section for ratios related to this activity and/or other open water travel.
- The responsibilities paddlers in the group (or each group if breaking up into smaller flotillas) have for one another must be outlined as well as the proximity that should generally be maintained between craft (e.g., all boats stay between their group's lead and sweep boats and check on the boat behind them frequently so they don't get too far ahead).
- Consider group management in this context; create appropriately spaced regroupings/raft-ups/eddy-outs if the participants are prone to getting too spread out (e.g., due to widely varying fitness levels, paddling skills and/or objectives) and/or to provide time for clothing adjustments, and water/snack intakes.

Review **Camping** if the boating activity is to involve overnighing.

Section 7-64

Canoeing

On-site Instruction	Age 6+
Day Tripping (< 3 hours)	Age 8+
Day Tripping (> 3 hours)	Age 9+
Overnight	Age 10+
Extended Tripping	Age 12+

Note: The above minimum age recommendations assume the participant is actively paddling with another similarly aged child (e.g., required to manage his or her end of the canoe). If there are one or more older, stronger paddlers in each craft to support and cover for them if they cease paddling, then children younger than those noted can be taken safely on most types of outings (e.g., a float down a mellow Grade 1 river in a canoe can be enjoyed by children of all ages with adult support in the boat).

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuit Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to General Considerations for Paddlesports)

Canoeing On-site Instruction

Leader Readiness

- The instructor must be competent to organize the canoeing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training may be secured through Paddle Canada, the Alberta Recreational Canoe Association or other appropriate sources.

Equipment/Location

- A pool or waterfront environment may be used (e.g., pond, lake, river).
- Up to three participants can be assigned to each canoe.
- Appropriate, properly sized and fitted helmets should be used when paddling on rocky streams or rivers of Grade 2 or above.



Instruction

Water Safety and Rescue Skills

- Self-rescues into dry and/or swamped canoes should be discussed and, weather and water conditions permitting, actually practiced.
- T-rescue and/or towing rescue procedures may be taught and practiced as appropriate (weather and water conditions permitting).
- If river paddling, participants must be taught emergency procedures relevant to a tip (their own or another boat).
- When paddling rivers with rocky bottoms, participants should be taught how to avoid foot entrapments (i.e., float with feet up off the bottom until it's shallow enough to stand safely).
- If river paddling, participants should be told how to catch and hold onto a throwbag or throw rope when being rescued.

Canoeing Skills

- Participants should be instructed and secure fundamental mastery in basic canoeing skills where such instruction will support safe participation in the canoeing activity and environment selected. Relevant skills taught may include:
 - lifts and carries,
 - launching from dock or beach as appropriate,
 - entry/exit from canoe,
 - body position and balance,
 - basic strokes and recovery braces,
 - basic maneuvers,
 - paddling on either side and at either end of the canoe,
 - switching paddling sides and synchronizing strokes, and communications in the boat.
- If it can be done safely, an “exploratory paddle” at the waterfront site is allowable before formal stroke and maneuver instruction.
- If canoeing on a river/stream of Grade 2 or above, participants should learn basic river maneuvers relevant to safely negotiating the watercourse (e.g., ferries, eddy turns, sideslips).
- The stern paddler should have a good grasp of basic steering, including use of the ‘j’ and stern sweep strokes. Participants should be taught how to handle anticipatable wind and wave conditions, and currents and obstructions if on a river.
- The bow paddler should be taught how to scan the path ahead for obstacles, to communicate the presence of such to his or her partner, and how to initiate evasive action.

Section 7–66

Canoe Tripping (Daytrip/Overnight/Extended)

All of Canoeing On-site Instruction Considerations, plus the following:

Equipment/Location

- Use appropriate waterproof canoe tripping bags/packs/jugs for clothing, sleeping gear, or double-wrap in plastic bags and then place in abrasion-resistant backpacks or duffels.
- If canoeing on Grade 2 or above rivers or streams, the canoes should be equipped with appropriate floatation (e.g., waterproof gear bags, air bag, foam, inner tube) installed to displace water and facilitate rescues.
- Ensure that the reach to be paddled is free of major hazards such as dams or weirs or that the participants are aware of these hazards, understand which side to get out at and have the skills to do so reliably with a good margin of safety.
- Supervisors should generally not plan a trip on a river above Grade 2 and only well-trained and prepared groups should be taken in rivers above Grade 1 (i.e., moving flatwater with no rapids). Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids.

Instruction

- Ensure participants have sufficient river reading and boat negotiation skills to avoid anticipatable hazards (e.g., rocks, holes, sweepers, logjams).
- Generally avoid open water crossings (lake or ocean), particularly if wind, surface chop, deadheads, and/or currents are unfavorable. Skirting the shore is usually preferable (within 80 meters). Tell participants what they are to do if their or another canoe(s) gets blown off-course and have a plan for retrieving them.
- Participants should learn how to pack their canoe for appropriate weight distribution (e.g., keeping weight low, maintaining at least 15 cm of freeboard, and bow slightly higher than stern). All gear should be tied/clipped in.
- Conduct a lengthy portage much like a day hike, with a lead and sweep, buddy system, and drop points or regroupings at trail intersections if people may get lost. Use existing trails as much as possible.

Supervision

- In-the-area supervision.
- Ratio as per calculation, with additional competent leaders needed for larger groups negotiating more hazardous water (e.g., large open body of water; moving water).
- Where the physical fitness and/or technical canoeing skills of participants vary, each boat should be heterogeneous (i.e., less capable paddlers partnered with more capable).
- In situations where rescuers will need to be highly effective and efficient, the leader(s)/assistant leader(s) should avoid paddling with particularly weak paddlers in the group.

See **Base/Remote Camping**, and **Hiking** and **Backpacking** for other considerations.



Multiple Paddler Craft

Age 8+

There are a number of craft that are used in Alberta that require a number of paddlers. As these craft are often tied to cultural traditions in Canada, they offer wonderful education as well as recreation opportunities. The craft that will be considered in this section include voyageur canoes and traditional aboriginal craft (e.g., dugout canoes, First Nations cedar canoes, Northern Dancer Clipper canoes, Dragon boats and outrigger canoes). On-site instruction or daytrips are assumed.

Rafting is covered in a separate section.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Leader Readiness

- There are no specific training/certification courses for multiple paddler craft, but the competent small craft instructor can adjust to these craft with some practice.
- Experience handling the craft is needed. The craft are often heavy and difficult to turn, so the bows-person must have good river reading and anticipation skills, and both bows-person and sterns-person must be capable paddlers.
- Moving water and canoe tripping experience are needed if tripping, in waters comparable to those to be paddled with the group.
- Assistant leaders steering or bowing in other boats should be capable paddlers with competence in relevant rescue skills.

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Equipment/Location

- The craft are often very heavy (sometimes 120 kilos or more) and they should not be moved without sufficient numbers of people. If a boat must be carried, one person needs to lead the process and to clearly communicate what the group is to do, how and when. For groups of young participants, sufficient numbers of adults should be recruited to assist with these tasks.
- Access and egress sites should be selected which minimize the amount that the craft(s) need to be carried. It is ideal if the trailer carrying the boat can be backed directly into the water or at least up to the water's edge.
- There should be a minimum of two craft on a trip, unless a single craft is equipped with a self-inflating rescue raft or other rescue craft accompany the craft.
- A pond, lake, slow moving river or inlet may be used for this activity.

Instruction

- Participants should be taught how to work together to lift, carry, launch, enter/exit safely and balance the group's weight in the boat.
- Basic strokes and maneuvers relevant to powering and steering the craft should be taught.
- Participants must know what to do in the event of the upset of a craft; their own or someone else's.
- A leader or strong paddler with good sense of the water being paddled should be in the stern to steer and direct participants.
- A mature paddler who has the skills to scan the water in front for adequate depth and absence of obstruction, and the ability to communicate direction changes needed and to initiate these, should be in the bow.

Supervision

- On-site supervision.
- One leader per craft; additional leaders as per calculation; more if participants are young.
- If a craft tips, do a head count as soon as practical to ensure all participants are accounted for.



River Kayaking

On-site Instruction	Age 8+
Day Tripping (< 3 hours)	Age 10+
Day Tripping (> 3 hours)	Age 11+
Overnight Tripping	Age 12+
Extended Tripping	Age 14+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Kayaking On-site Instruction

Leader Readiness

- The instructor must be competent to organize the kayaking activity; to demonstrate, instruct and supervise it; and to effect rescues and emergency procedures as necessary.
- Instructors/leaders may secure training and/or certification from Paddle Canada, Alberta Recreational Canoe Association, Alberta Whitewater Association, or another appropriate source(s).
- All assistant instructors/leaders must have adequate competency to support the participants and to execute rescue in the anticipated water.

Equipment/Location

- Slalom or river kayaks are assumed for this activity. If touring (sea) kayaks are to be used for a tripping activity, please refer to the **Sea Kayaking** section.
- Participants should wear wetsuits or clothing appropriate for open water kayaking, expecting to tip at some point in the session.
- Hard-shell helmets (properly sized and fitted) should be used when paddling on rocky streams or rivers at or above Grade 2.

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- Footwear must be light-weight and securely fastened to protect feet from rocky bottom. Running shoes or water shoes with strong soles are good. Rubber boots or other bulky footwear should be avoided.
- Water conditions should be appropriate for the type of kayak being used and the skill level of the participants.
- Kayaking should be introduced in a pool or on calm, still water before progressing to moving water applications.
- If paddling at a waterfront for instructional purposes, kayakers should be given boundaries (e.g., a buoyed-off area) in which to stay.
- A good river teaching site should have adequately sized eddies on each side to accommodate all of the paddlers at once and a safe area below for conducting rescues.

Instruction

Water Safety and Rescue Skills

- Participants must be comfortable and confident in the water; a survival swimming practice and/or assessment is recommended as per the **General Considerations for Paddlesports**.
- If participants will be using sprayskirts, instruct them first in wet exits without their skirts, and then with them. Ensure that when putting the skirt on the boat, they keep the pull toggle accessible.
- Participants should be taught appropriate self-rescue (e.g., kayak roll) and assisted rescue skills (e.g., pulling up off another boat's bow) for the type of craft and water to be paddled. Novices shouldn't be expected to master these techniques and be able to apply them in tripping situations; secondary back-up rescue systems must be in place.
- Where paddlers are in tandem kayaks, they should learn and practise wet escapes as a pair to avoid collisions with each other.

Kayaking Skills

- Beyond the above, participants should be taught and demonstrate basic skills that are appropriate to safe participation in the activity and environment. These skills may include:
 - proper adjustment of foot braces for good fit in boat,
 - lifting, carrying and launching kayak,
 - emptying the kayak (beach or dock as relevant),
 - getting in and out,
 - body position and balance,
 - T-Rescue and/or towing rescue (if paddling slalom kayaks),
 - basic strokes and braces, and
 - basic maneuvers.
- If river kayaking, participants should be taught basic river maneuvers that are appropriate to safe participation in the kayaking activity and environment (e.g., ferries, eddy turns, sideslips).
- Participants should be instructed on how to handle anticipatable wind and wave conditions if preparing to take a trip on a lake, the ocean, or on a large river.



Supervision

- On-site supervision.
- Ratio as per calculation and also recognizing the risk of novice kayakers panicking when they tip over and fail to properly extricate themselves from their boat. The instructors must know they (or paddler's partners or assistants) can assist every participant quickly in the event several have this problem at once.

River Kayaking Day Tripping: *all of On-site Instruction, plus:*

Equipment/Location

- Introductory kayaking generally involves flatwater kayaking; paddling on a lake or a stream or river where no significant rapids exist and eddies are very slight (i.e., not above a Grade 1 river). Only well-trained and supported groups should venture on Grade 2 water or above. See guidebooks or paddling route maps for ratings or discuss with area officials, paddling associations or clubs familiar with the route. Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids.
- Appropriate waterproof bags/packs/jugs used or all spare clothing, or double-wrapped in separately tied plastic bags and then placed in abrasion-resistant bags.
- If paddling a narrow river where good boat negotiation skills are needed, ensure that the reach to be paddled is not running unusually high and that it is free of major hazards that cannot be readily seen and avoided (e.g., weirs, windy with extensive sweepers or logjams).

Instruction

- Participants are aware of potential hazards on the run and how to avoid these.
- All participants must know and have practiced emergency procedures for one or more overturned boats, their own and/or others, preferably practiced in moving water if that is what they will be paddling.
- If river paddling, they must know what to do if they upset and end up swimming.

Supervision

- In-the-area supervision in general.
- Constant-visual at the site of significant hazards. For example, have a rescue boat waiting in an eddy and perhaps one or two people on shore with throwbags at rapids likely to produce swims.
- Have a lead and sweep consisting of competent paddlers capable of carrying out a rescue if needed.
- Ratio as per calculation, with additional trained leaders needed for larger groups and/or those negotiating more challenging water (e.g., large open body of water; Grade 2 or above river or Class 2 or above rapids).

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Sea Kayaking

On-site Instruction/Day Tripping
Overnight/Extended Tripping

Age 12+
Age 14+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to General Considerations for Paddlesports)

Sea Kayaking On-site Instruction/Day Tripping

Leader Readiness

- The instructor/leader must be competent to organize the sea kayaking activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- The instructor/trip leader must be comfortable and capable on and near the sea, including, but not limited to competence in:
 - understanding waves, tides, river outflows, rip currents and sandbanks, beach hazards, and how these affect ocean travel,
 - sea traffic hazards (e.g., shipping lanes, ferries, float planes),
 - reading tide/current tables and nautical charts,
 - reading local winds, coastal weather and making accurate short term forecasts,
 - navigating on and along coastal areas, including points, reefs (dealing with reduced visibility), etc.,
 - taking off and landing in manageable surf,
 - reading warning signs and flags, and dealing with ships and wakes,
 - understanding relevant ocean flora and fauna and how to minimize negative interactions with such,
 - executing rescues of self (e.g., kayak roll, paddle float rescue) and others (e.g., towing rescue, T-rescue, stirrup re-entry), and
 - using the communications system (e.g., satellite phone, VHF radio) to secure weather information, make distress calls and/or engage in other important communications



- Instructors/leaders should secure training and/or certification from the National Association of Sea Kayaking Instructors, Sea Kayak Association of British Columbia, Canadian Federation of Ocean Kayak Educators, Paddle Canada, Recreational Canoeing Association of British Columbia and/or other appropriate sources.
- All assistant leaders/supervisors must have adequate competence to support the participants on the trip and to execute rescue in the anticipated water.

Equipment/Location

- Sea (touring) kayaks are assumed for this activity. If river (slalom) kayaks are to be used, please refer to the **River Kayaking** section.
- Each craft should be outfitted with a sprayskirt, spare paddle, a paddle float, a buoyant heaving line of 15 meters, bailer or water pump, and a PFD and whistle (per paddler).
- Wetsuits/drysuits should be considered except on very short trips in very sheltered areas.
- Sea kayaking can be introduced in a pool, lake or ocean environment, but not in fast moving water. If on the ocean, a protected bay, inlet or other safe area should be used. Be particularly cautious in open areas with off-shore winds and/or subject to the effects of incoming or outgoing tides.
- If paddling at a waterfront, kayakers should be given boundaries (e.g., a buoyed-off area) in which to stay.
- Retreat to the first safe site along the shore if a major storm blows in, particularly if it is accompanied by lightning.

Instruction

Water Safety and Rescue Skills

- Practise rescue of self and others in a safe environment (e.g., pool, pond, calm waterfront) prior to an outing.
- Participants should be instructed in wet exits from a kayak.
- If participants will be using sprayskirts, instruct them first in wet exists without their skirts, and then with. Ensure that when putting the skirt on the boat, they keep the pull toggle accessible.
- Participants must be informed about the potential hazards likely to be encountered on the route and safety procedures to minimize the risks.
- Participants should be taught appropriate self-rescue (e.g., kayak roll, paddle float use) and assisted rescue skills (e.g., towing rescue, T-rescue, stirrup re-entry) for the type of craft and water to be paddled. However, novices shouldn't be expected to master these techniques and be able to apply them in tripping situations; secondary rescue systems must be in place.
- Where paddlers are in tandem kayaks, they should learn and practise wet escapes as a pair to avoid collisions with each other.

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Sea Kayaking Skills

- As a pre-requisite for open water kayaking, participants should be taught and demonstrate basic skills that are appropriate to safe participation in the sea kayaking activity. These skills may include:
 - proper adjustment of foot braces for good fit in boat,
 - lifting, carrying and launching kayak,
 - emptying the kayak (beach and dock),
 - getting in and out,
 - body position and balance,
 - basic strokes, steering, maneuvers and braces, and
 - taking off and landing in waves or surf.
- Participants should be taught about hazards associated with ocean flora and fauna and how to minimize the impact of these.
- Participants should be instructed on how to handle anticipatable wind, wave and current conditions if preparing to take an open water trip.

Supervision

- On-site supervision.
- Recognize risk of novice kayakers panicking when they tip over and failing to properly extricate themselves from their boat. The instructors must know they can assist every participant very quickly in the event several have this problem at once.
- Generally, consider a ratio of one adult paddler to 4–5 participants if in solo boats, 4–6 if in double kayaks, except in the most protected of bays.
- Have a plan and practice strategies for keeping the group together in deteriorating conditions (e.g., buddy system, counting off).



Sea Kayaking Overnight/Extended Tripping ***All of On-site Instruction/Day Tripping plus:***

Equipment/Location

- Avoid routes that place the participants on open, exposed areas of the sea for extended periods of time where rising winds can increase wave action substantially in a short period of time. Group management and support becomes very difficult in large waves, especially with loaded boats. Keep crossings manageable (i.e., well within the capacity of the weakest paddler in the group in the worst conditions anticipatable).
- Where an open water crossing is unavoidable, consider providing or securing an escort support boat (e.g., powerboat, zodiac).
- Avoid surf landings whenever possible with groups of novice participants, especially with loaded boats. Plan the trip so each day's paddle begins and ends in protected water.
- If paddling in areas with icebergs, ensure all paddlers give them a wide berth. Icebergs can roll and crush a paddler or calve off heavy pieces of ice.
- Store clothing and gear in waterproof compartments in the boats and seal these properly.
- Avoid paddling in shipping lanes and other major boat routes. If unavoidable, keep the boats close together and consider carrying a radar reflector to increase visibility to large boats (a boat's radar equipment won't pick up a signal from a plastic or fibreglass kayak, but it will from a metal reflector rod if one is affixed to the kayak).
- Recognizing the potential for motion sickness when paddling on large open bodies of water like large lakes or the sea, motion sickness medication should be carried. Parents should provide consent for their child to be administered this type of medication if it is indicated.
- A marine VHF satellite phone, cell phone, radio, or other appropriate means of securing current weather forecasts and/or timely assistance in an emergency is required.

Instruction

- Participants should be taught how to conduct routine checks on their boats.
- All participants must know and have practiced emergency procedures for one or more loaded overturned boats, their own and/or others.

Supervision

- In-the-area supervision.
- Have a lead and sweep consisting of competent paddlers capable of carrying out a rescue if needed.
- Ratio as per above.
- The Sea Kayak Guides Alliance of BC offers some ratios specific to water classification (see <http://www.skgabc.com/>).

See **Base/Remote Camping**, and **Day Hiking** and **Backpacking** for other considerations.

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Rafting

Day Tripping Whitewater Rafting

Age 10+
Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Leader Readiness

- The instructor/leader must be competent to organize the rafting activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- There are several companies that offer rafting training courses for trip leaders/guides in Alberta and BC and in BC, commercial rafting guides must be certified by the Registrar of Commercial River Rafting. An individual with canoeing/kayaking training from Paddle Canada, the Alberta Recreational Canoe Association, or the Alberta Whitewater Association may be able to apply much of their knowledge and skills to introductory rafting. Moving water and relevant rafting paddling experience are required if taking participants on rivers.
- Assistant leaders steering boats must be capable rafters with relevant experience and good rescue skills.

Equipment/Location

- Ensure rafts are adequately inflated and free of leaks.
- Properly sized and fitted hard-shell helmets should be worn when conditions warrant; i.e. rocky bottom, river rated at Grade 2 or above.
- Encourage the wearing of appropriate footwear; light weight and securely fastened to protect feet from rocky bottom. Running shoes or water shoes with strong soles are good.
- Ensure that the reach/section to be paddled is free of major hazards such as weirs.
- Generally, a youth program trip should not be planned through white water above



Grade 2 and only very well-trained and prepared groups should be taken in rivers above Grade 1 (i.e., lakes or moving flatwater with no rapids). Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids.

Instruction

- Participants should be taught how to work together to lift, carry, launch (dock or beach, as appropriate), enter/exit safely, sit and balance the group's weight in the raft.
- Participants should be instructed in river reading and must have sufficient boat negotiation skills to avoid anticipatable hazards (e.g., rocks, sweepers).
- Participants should be taught basic strokes, maneuvers and braces and the communication system to be used so they will know what to do when.
- All participants must be familiarized with emergency procedures for one or more overturned rafts, their own and/or others.

Supervision

- On-site supervision.
- One leader per boat. Additional leaders as needed as per calculation and more if younger group.
- A leader or strong paddler with good sense of the water being paddled should be in the stern of each craft.
- Where the physical fitness and/or technical rafting skills of participants vary, each boat should be heterogeneous with respect to physical strength, endurance and skill (i.e., each raft with some stronger and some weaker paddlers).
- Do a head count after a flip as soon as practical to ensure all participants are accounted for.

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Rowing

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of this document.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity or outing I am planning.*
- I have a solid understanding of all the material in the subsection General Considerations for Paddlesports and General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Activity Instruction

Leader Readiness

- The instructor must be competent to organize the rowing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the rowing activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- Training may be secured through the Alberta Rowing Association, Rowing Canada, or other appropriate sources.

Equipment/Location

- A pool or waterfront environment may be used (e.g., pond, lake, slow moving watercourse). Avoid open water sites with strong offshore winds.
- Transport Canada has exempt rowing shells from carrying of safety equipment only if it is attended by a safety craft carrying a PFD or lifejacket of appropriate size for each member of the crew of the largest vessel being attended (in addition to its own safety equipment) or if it is competing or training during a provincially, nationally or internationally sanctioned regatta (refer to www.boatingsafety.gc.ca).
- Adverse weather is of particular concern for rowing shells and sculls, Environment Canada tracks severe storms and issues advisories which are of most concern to rowers in “real time” on their website www.weatheroffice.ec.gc.ca.
- A system of colour codes can be used to communicate local weather conditions in a prominent place for all rowers to see: e.g.: Red for Storm is upon the course, take cover, Grey for Storm is closer than 15 minutes, seek cover, Orange for stop any departure and clear the course, Yellow for Storm is imminent, Blue for adverse weather possible, Green for all clear, no weather related problems.



Instruction

Water Safety and Rescue Skills

- Self-rescues into dry and/or swamped shells or swimming with the boat to shore should be discussed and, weather and water conditions permitting, actually practiced.
- Rescue procedures may be taught and practiced as appropriate (weather and water conditions permitting).
- Shells and sculls should proceed single file in narrow stretches of a watercourse.
- Rowers are responsible for following the traffic pattern at all times, but be aware of and avoid other traffic who may/may not be following the traffic pattern.
- A logbook for launching and returning is an appropriate way to keep track of who is on the water.
- In coxed boats the coxswain is in command of the boat at all times and should be given complete attention and respect.
- The coxswain guides the boat by steering and commanding the crew.
- Crew members should not talk while the boat is moving: it makes it hard to hear.
- A rower who sees a hazard that the coxswain does not should notify the coxswain.
- All rowers should exit the watercraft and take cover in the event of thunder or lightning.
- Be aware of fishermen or others using the watercourse.
- Be aware of wakes from powerboats.

Rowing Skills

- Participants should be instructed and secure fundamental mastery in basic rowing skills where such instruction will support safe participation in the rowing activity and environment selected. Relevant skills taught may include:
 - lifts and carries,
 - launching from dock or beach as appropriate,
 - entry/exit from shells,
 - body position and balance,
 - basic strokes and recovery,
 - basic maneuvers,
 - paddling on either side and at either end of the shells,
 - synchronizing strokes, and communications in the boat.

Supervision

- In-the-area supervision.
- Ratio as per calculation.

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General Considerations for Powerboats and Sail Boats

Motorized and sail craft are used for youth recreation experiences, sometimes for purposes of learning the activity, but also often as a means of transportation for other purposes (e.g., using powerboats or sailboats to get to snorkeling or scuba sites, power boating to a whale watching site).

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it (e.g., slipping and falling in the boat);
- Injuries related to collisions with movable (e.g., other boats) or immovable (e.g., rock) objects;
- Injuries related to capsize of craft or falling out of craft;
- Injuries if capsizing in moving water environments due to foot entrapment in bottom hazards such as rocks and submerged branches;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;
- Hypothermia due to remaining in cool/cold water too long or due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., overheating) due to insufficient hydration, overdressing and/or overexertion;
- Injuries related to equipment (poor fit, improper adjustment, malfunction, or becoming tangled in apparatus; e.g., foot snag in lines);
- Injuries related to lifting, carrying, walking with, or putting down the craft and/or packs;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Motion sickness when on large wavy bodies of water (lakes, ocean);
- Drowning or near drowning;



- Illness related to poor personal hygiene, or failure to purify drinking water;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee stings or jelly fish stings in ocean) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness related to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Leader Readiness

- The leader must be competent to organize the boating activity; to demonstrate, instruct and supervise it, and to effect rescue and emergency procedures as necessary. The more remote and/or longer the boating activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- Watercraft are governed by laws and regulations under jurisdiction of Transport Canada, Office of Boating Safety. It is imperative for a leader to know and observe the Small Vessel Regulations, Collision Regulations, and VHF Radiotelephony Practices and Procedures Regulations all of which are part of the Canada Shipping Act.
- The leader should be familiar with Transport Canada regulations for the vessel(s) in use with regard to operator certification. Such certifications depend upon whether the craft in use is designated a commercial or pleasure craft. Refer to www.boatingsafety.gc.ca.
- All pleasure craft fitted with a motor require the operator to hold a Pleasure Craft Operator Card. Training for this may be found through a variety of organizations approved by Transport Canada's Office of Boating Safety. Contingent upon the vessel's application and size, commercial operators may require a variety of certifications.
- All VHS radio operators are required to have a restricted operator's certificate (ROC) with maritime qualifications (ROCMC).
- If the craft are to be transported by trailer to and from the water, the individual driving the tow vehicle must have sufficient experience and skill to manage these tasks safely.
- The leader and assistant leaders must be capable swimmers, able to manage themselves confidently in the water in the selected environment.
- The instructor or designated other must be able to provide CPR.
- All assistant instructors/leaders must be competent boaters, capable of supporting the group and effecting/helping effect appropriate rescues in the type of water anticipated.
- The leader must be comfortable and capable on and near the waters intended to whether lake, pond, river or ocean. Those competencies to include but not limited to:
 - reading local winds and weather and making accurate short term forecasts,
 - navigating accurately in the area,
 - executing rescues of self, and others,
 - understanding waves, tides, river outflows, currents and sandbanks, beach hazards, and how these affect water travel,
 - reading tide/current tables and nautical charts,
 - reading warning signs and flags, and dealing with ships and wakes,

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- understanding relevant flora and fauna and how to minimize negative interactions with such,
- executing rescues of self and others,
- experience in using all communications and navigational systems on board the craft.
- If the group is divided into two groups, then at least one supervisor in each group must have all of the above competencies.

Equipment/Location

- The Transport Canada, Office of Boating Safety establishes standards and regulations. These change periodically and it is the responsibility of vessel operators to comply with current standards.
- Commercial vessels used for carrying passengers must obtain Transport Canada permits to operate. Confirmation of current permits is advisable.
- Correct fitting Transport Canada approved PFD's/lifejackets or Floater Suits with whistle attached to each, must be worn properly and done up at all times by all participants while on/in the water.
- There must be a bailing device or a manual water pump in each craft.
- A paddle or an anchor with a minimum of 15m of cable, rope or chain.
- There must be a minimum 15m, length of buoyant rope attached to the craft.
- A watertight flashlight or navigation lights are required in case of reduced visibility like fog.
- Increased boat size and power increases the need for safety gear, including lifebuoy, ladder, lifting harness, fire extinguisher, axe, multiple sound signaling devices, buckets, flares etc. Consult the Office of Boating Safety about specific requirements for the vessel(s).
- Emergency communication equipment – VHF/HF radio, cellular or satellite phone – should be waterproofed and easily accessible. It is the leaders responsibility to ensure that this equipment is appropriate and fully operational along the intended route.
- A cellular phone is not a good substitute for a marine radio in an ocean emergency as they do not alert other boats close to you that you are in distress and unlike VHF transmissions, cannot be followed back to your location by rescuers.
- Consider potential implications if a watercourse is subject to sudden and/or significant fluctuations in volume (e.g., impact of dams, storms, diurnal, seasonal or tidal variations).
- Craft should be checked for leaks, broken seats, etc.
- Do not exceed the weight load or capacity for the craft used.
- Accessory gear should be secured to avoid entanglement.
- Ensure the first aid kit is waterproofed.
- All equipment should meet Canadian Shipping Act regulations.
- Postpone water-travel if there are indications of inclement weather (e.g., lightning, storm activity, high wave conditions, or strong winds).
- At the end of each trip, and upon changing watercourses, wash any mud, algae or plant fragments from boats, gear and feet to avoid transmitting any plant or animal pest species to previously uninfected places.



- It is not uncommon for boaters along BC's southern coast to pass unintentionally into US waters. Operators must be knowledgeable of and comply with US regulations when in US waters. Only in emergency circumstances should a Canadian registered boat with non-US citizens aboard attempt to go ashore on US soil unless it is a planned event, with all proper permission and proper identification of passengers on board.

Instruction

- Participants should be comfortable in boats. Because they are wearing PFDs or Floater suits, it is not essential that they be able to swim.
- Participants should be instructed in what to do in emergencies (e.g., fire, person overboard).
- Participants should be made aware of possible hazards on the boat, location of vessels toilet if available, and how to gain the attention of the driver if needed while underway.
- Participants should be instructed to remain seated while the vessel is under power, especially if it is an open vessel.
- Participants should be instructed as to how to behave while near marine animals (e.g., look but do not touch).

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Sailing

On-site Instruction	Age 10+
Day Tripping (< 3 hours)	Age 11+
Day Tripping (> 3 hours)	Age 12+
Overnight Tripping	Age 12+
Extended Tripping	Age 14+

Sailing is a popular activity on Alberta's lakes and the coast of BC. In the youth program context it typically, but not necessarily, involves introductory instruction and day trips on small sail craft.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in subsection General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Powerboats and Sailboats.

On-site Instruction/Day Trips

Instructor/Leader Readiness

- The instructor/leader must be competent to organize the sailing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the sailing trip is to be, the more knowledge, skill, fitness and experience the lead instructor/leader must have.
- At least one instructor/leader should have training from the Alberta Sailing Association (ASA), Pleasure Craft Operators Card, Canadian Power Squadron Boating and Seamanship Sail program, the Canadian Yachting Association (CYA), National Coaches Certification Program (NCCP) and/or other appropriate sources.
- Assistant instructors/leaders should be competent sailors experienced with sailing the type of craft to be used and on the type of water anticipated.
- All instructors/leaders must be capable swimmers (e.g., survival swim test: roll in, orient self, tread 1 min. and swim 50 meters – all while wearing a PFD and no goggles).



Equipment/Location

- Sailing vessels and other group and personal equipment should have been selected for its appropriateness for the participants, maintained and repaired as appropriate and inspected for defects prior to use.
- The mainsail must be capable of being lowered while the boat is capsized.
- The centerboard and rudder blade must be securely attached to the boat
- All boats must carry an attached bailing bucket or a bilge pump.
- Inspect rigging prior to sailing.
- All participants must wear a correctly fitting Transport Canada approved PFD/life jacket, with whistle attached, done up at all times while sailing on craft of a size where Coast Guard regulations require such. Non-swimmers or very weak swimmers (as determined by swimming level or endurance test – see **Aquatics**) should wear them at all times on deck of any sail-craft.
- Loose fitting clothing should not be worn around ropes and rigging (e.g., tuck in baggy t-shirts) and long hair should be tied back.
- Participants should wear appropriate shoes with a non-slip sole (e.g., running shoes).
- Rings, watches and other jewelry that could snag in ropes or other sailing apparatus should be removed or taped down.
- Restrict sailing to designated sailing areas. Select confined waters for introductory instruction.
- Instructors must take weather and water conditions into consideration, being particularly conservative regarding sailing with strong winds, offshore winds and wave conditions on shallow lakes or seas.
- Where possible, avoid crossing shipping lanes and busy harbour channels.
- Powered rescue boats should be fast enough to allow prompt response and have sufficient power to tow the sailing boats even in adverse weather/water conditions.
- Powered rescue boats must be in good working order and must carry personal protection and boat safety equipment as required by transport Canada dependant upon the size of the craft.

Instruction

- Participants should be comfortable in the water. Because they are wearing PFDs, it is not essential that they be able to swim well, but if comfort/competence in the water is in question, a survival swim test should be given in a pool or in open water (e.g., roll in, orient self, tread 1 min. and swim 50 meters – all while wearing a PFD and no goggles).
- Participants should be instructed in person overboard procedure, and what to do if a boat upsets (theirs and others’).
- Instruction in sailing should include content and skills relevant to safe participation in the sailing activity and selected environment. This may include:
 - familiarizing the participants with the equipment to be used including terminology, use and care (e.g., not stepping on lines),

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- lifting, carrying, launching and landing sailboats (as appropriate),
- pre-departure check,
- flag and whistle signals,
- the way a sail is affected by the wind,
- how to rig the sails (as appropriate),
- how to use the wind to sail, including moving forward, tacking, gybing, controlling speed, turning and coming about, and
- emergency procedures (e.g., hanging onto and righting an overturned craft).

Supervision

- On-site supervision.
- Where participants are learning to sail their own small sailboats, the instructor to participant ratio should generally not exceed six boats per rescue boat, unless in a very sheltered, confined bay or lake.
- If sailing small craft likely to upset, a motorized safety boat should be present (if allowed on the water body being used) or other secondary rescue system in place.



Windsurfing/Boardsailing

Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in subsection General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Powerboats and Sailboats)

Additional Known Potential Risks

- Injuries related to slips, trips and falls on the board;
- Injuries related to collisions with movable (e.g., other boarders/boards or one's own board) or immovable (e.g., rock) objects;
- Injuries related to board capsize or falling off of board;
- Injuries related to equipment malfunction (e.g., rigging jammed) or becoming tangled in apparatus (e.g., snagging in rigging); and
- Psychological injury related to anxiety of open water.

On-site Instruction/Day Trips

Leader Readiness

- The instructor/leader must be competent to organize the windsurfing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the windsurfing activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- At least one instructor/leader should have training from the Alberta Sailing Association (ASA), Pleasure Craft Operators Card, Canadian Power Squadron Boating and Seamanship Sail program, the Canadian Yachting Association (CYA), National Coaches Certification Program (NCCP) and/or other appropriate sources.
- Assistant instructors/leaders should be competent sailors experienced with sailing the type of craft to be used and on the type of water anticipated.

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Equipment/Location

- Board and sailing apparatus must be in good working condition and board with sufficient built-in buoyancy to support the youth.
- The board should be capable of being de-rigged while it is afloat.
- An approved PFD for each participant, with whistle attached, is required.
- Wetsuits should be considered for all sponsoring organization-based windsurfing, recognizing the season and potential for repeated dippings in cool to cold water.
- Define boundaries for the activity. This activity should be introduced in confined waters. Avoid boarding in areas with motorboat or larger craft powering in area.
- Offshore winds should be avoided with novices.
- If on open water, a tether from board to boarder is suggested.
- Check the teaching area for sufficient water depth and potential hazards (e.g., broken glass, overhead wires or obstacles, rocks, shoals, strong currents).
- Check the weather and postpone the activity if storms, strong offshore winds or choppy waves are present.

Instruction

- Parents/guardians should be asked to verify the level of swimming training/skill the participant has.
- Because there is high potential for youth to fall in the water, sometimes in unusual positions, participants involved in this activity should be comfortable and competent in the water while wearing a PFD.
- If the swimming ability of a participant is unknown, before being permitted to participate in water above their chest height without a PFD the participant should be given a **survival swim test** (roll in, tread 1 min., swim 50 m. any style without PFD or goggles) or **endurance swim test** (50 m. swim any style). The selected test will generally be conducted by the lifesaver or may be conducted by another leader as long as it is undertaken in shallow water only and with little or no current present.
- Participants must be familiar with emergency procedures and self-rescue skills related to the equipment and facility (e.g., remounting the board, hand paddling to safety).
- Participants should be instructed regarding how to assist another boarder in difficulty.
- Participants should be familiar with hypothermia prevention, recognition and treatment.
- Instructors should be aware of weather and water conditions and how these are likely to influence safe performance of the skills taught and participant comfort.
- Participants should be instructed in basic windsurfing skills where such instruction will support safe participation in the windsurfing activity and environment selected. Skills taught may include:
 - familiarization with the equipment to be used (e.g., terminology, use and care);
 - lifting, carrying, launching and landing boardsails (if appropriate);
 - flag and whistle signals, as appropriate;
 - the way a sail is affected by the wind;



- how to rig the sail;
- how to use the wind to boardsail, including moving forward, gybing, tacking, controlling speed, turning and coming about, and
- how to right the boardsail in the event of a capsize on open water.

Supervision

- On-site supervision.
- Supervise non-swimming or weak swimming youth more closely.
- Generally, unless in a very sheltered, confined bay or lake, there should not be more than six boards/leader.
- Watch participants for signs of hypothermia; it can come on quickly due to repeatedly getting wet and then exposed to the breeze/wind.
- A motorboat or other suitable rescue craft must be present to aid in supervision/rescue of boardsailors distant from shore, or other appropriate secondary rescue system put in place.

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Snorkeling

Age 9+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Background Information) of this document.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Outdoor Pursuits) pertinent to the activity or outing I am planning, especially Aquatics.*
- I have a solid understanding of all the material in Section 7 (Adventure Pursuits Activities) regarding Aquatics.*
- If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to Aquatics and Open Water Aquatics)

Additional Known Potential Risks

- Injuries related to slips, trips and falls (e.g., while wearing swim fins);
- Injuries related to collisions with movable (e.g., other swimmers, passing boats) or immovable (e.g., pool wall if in pool, underwater rock if in open water) objects;
- Injuries caused by inhaling water through an uncleared snorkel;
- Blackouts or other injuries caused by excessive breath holding or hyperventilation.

Leader Readiness

- The instructor/leader must be competent to organize the snorkeling activity; to demonstrate, instruct and supervise it, and to effect rescue and emergency procedures as necessary.
- If the participants are to snorkel in water more than chest deep and are not wearing PFDs (which preclude underwater swimming), then a certified lifeguard or a lifesaver (e.g., Bronze Medallion) must be in attendance.
- A certified scuba instructor (see **Scuba Diving** in **Section 7**) may instruct, supervise and serve as lifesaver for this activity.
- First aid and CPR capacity must be immediately accessible on site (see **First Aid** in **Section 6**).
- If the participants are only to be snorkeling in shallow water, or at the surface while wearing PFDs, then the guidelines for **Open Water Swimming** should be followed.



Equipment/Location

- Ensure participants have a mask, snorkel and fins that fit.
- If all or part of the water used is more than chest deep, all non-swimmers or very weak swimmers must wear a PFD.
- In Alberta and Canada, most open water snorkeling is done while wearing wetsuits or dry suits. Ensure these fit appropriately for comfort, functionality and maneuverability.
- Where wetsuits are used, a weight belt will be needed to submerge. Ensure it has a quick release buckle.
- The instructor/leader must be familiar with the dive site from previous reconnaissance.
- If open water snorkeling (from boat or shore), the area must be secure from motorized vehicles (e.g., power boats, jet skis) or a diver's flag must be posted.
- If open water snorkeling from a boat, the boat must be equipped with appropriate safety and rescue equipment (e.g., float, reaching and throwing assists, first aid kit and blanket).
- Have emergency transport available.

Instruction

- Participants should be introduced to basic skills related to safe participation in the activity and environment selected. This may include:
 - pre-dive check,
 - hand signals,
 - clearing the mask and snorkel,
 - swimming with fins,
 - entry and exit methods and surface diving,
 - equalizing ears (as appropriate to age group),
 - buoyancy control,
 - ditching the weight belt,
 - staying with group and dangers of not doing so,
 - avoiding hyperventilation and/or excessive breath holding,
 - inflating life vest,
 - dangerous marine life, and
 - rescue techniques.

Supervision

- On-site supervision.
- For open water snorkeling, one supervisor is to remain out of the water, outfitted with snorkeling equipment.
- Ratio in pool environment is generally about 1:12, considering size and shape of pool area and age/maturity of participants.
- In open water context, there must be at least two adult supervisors present, one of whom is the leader responsible for the group. Consider size of snorkeling area, water clarity, presence of any currents/other hazards and maturity of participants in establishing ratio; approximately 1:8 is common.
- Use a buddy system.

See **Aquatics** for other considerations.

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Scuba Diving

Age 14+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Background Information) of this document.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Outdoor Pursuits) pertinent to the activity or outing I am planning.*
- I have a solid understanding of all the material in Section 7 (Adventure Pursuits Activities) regarding Aquatics and Snorkeling.*
- If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following additional guidelines:

Known Potential Risks

- Injuries related to equipment (improper fit, improper adjustment, malfunction, failure to use the equipment properly, or becoming tangled in apparatus (e.g., buoy line);
- Hypothermia due to remaining in cool/cold water too long;
- Weather changes creating adverse conditions (e.g., murky water);
- Choking or problems related to breathing in water through a snorkel;
- Decompression illness/injury;
- Air embolism due to breath holding on ascent;
- Injuries due to interactions with animals or plants in the environment;
- Psychological injury due to anxiety (e.g., fear of not being able to breathe);
- Panic due to separation from others, water depth, disorientation;
- Complications of injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Teacher/Leader Readiness

- The instructor/leader must be competent to organize the scuba activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training/certification must be secured from the Professional Association of Diving Instructors (PADI), National Association of Underwater Instructors (NAUI) or Association of Canadian Underwater Councils (ACUC) or equivalent.
- Instructors/leaders must have CPR.
- Leaders should check that the service provider instructor has an annual renewal sticker for the current year on his or her certification card. This ensures that the instructor has insurance.



Equipment/Location

- Participants need a mask, snorkel and fins that fit and are adjusted properly.
- Check all diving gear prior to use. Instructors check and set up/closely supervise set up of all gear for novices.
- Check that tanks have adequate air.
- Have an approved, appropriately sized buoyancy compensation device (BCD with auto-inflate) for each participant, with whistle attached, and a weight belt with a quick release buckle.
- In Alberta, scuba diving is generally introduced in a swimming pool.
- In Alberta and Canada, virtually all spring and fall scuba diving is done while wearing wetsuits or drysuits. Ensure they fit appropriately for safety and functionality.
- Carrying dive knives is optional, but recommended if a site has substantial vegetation or fishing occurring in the region (potential ensnarement risks).
- Each instructor (and ideally each diver) will have a dive watch/bottom timer, depth gauge, compass, tank pressure gauge regulator, and octopus regulator.
- If boat diving, the following is also required:
 - Highly visible float with mermaid line,
 - Descent/ascent line incorporating a safety stop facility,
 - Decompression tables or reliable means of calculating decompression requirements,
 - Datum marker (e.g., GPS) or suitably weighted line and float, and
 - Notebook and pen (optional).
- At an open water site, check the teaching area for potential hazards. Put up a dive flag (international Code Flag “A”) or otherwise ensure safety from passing vessels.
- The instructor must establish clear boundaries for the activity, especially depth, as follows:
 - 12 meter maximum depth for introductory or entry diving courses,
 - 18 meters for full open water training, and
 - 39 meters for advanced or master diving courses.
- Ensure that the site has
 - Safe entry and exit points with minimal water movement,
 - No obvious dangers such as boat traffic or fishers,
 - A current less than 0.5 knot,
 - Stable weather (e.g., no storms) and water conditions, and
 - A minimum visibility of 3 meters underwater.
- Establish time limits for the activity, considering student experience, weather, water temperature, and whether wet/dry suits are worn.
- Have a fully charged extra scuba unit on board (boat diving) or on shore (shore diving).
- Instructor must know the location of the nearest decompression chamber.
- Instructor must know the location of the nearest oxygen source.
- Instructor must have a reliable communications system (e.g., satellite phone, Marine VHF, cellular phone).

See **Aquatics** for other considerations.

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Instruction

- Participants should undergo a medical screening by a physician prior to participating, particularly for open water dives.
- Participants must be capable swimmers. They should be able to swim 200 meters (on their fronts, with reasonable strength and coordination, with their face frequently in the water and without swimming aids (e.g., no PFD or goggles/mask)).
- The minimum age for any open water diving is 12 years.
- Participants must be taught safety-related practices relevant to participation in the scuba activity, including, but not limited to:
 - buddy diving,
 - basic communications above and below the water,
 - buoyancy regulation and coming up slowly,
 - equalization, and
 - the importance of always breathing while underwater.
- Participants should be taught scuba diving skills, as these relate to safe participation in the scuba activity in the selected environment. This may include:
 - selection and basic care of scuba gear,
 - how to put gear on and take it off,
 - pre-dive checks,
 - entry and exit methods,
 - clearing the mask and snorkel,
 - swimming with fins,
 - pacing (i.e., moving slowly in the water),
 - ditching the weight belt, and
 - buoyancy regulation.
- If participants are to do open water diving, they must receive a full instructional program (dryland and pool or other controlled environment) and be successful in all assessments here before doing so.
- No diving into caves or shipwrecks which prevent direct access to the surface, or in conditions of significantly reduced visibility (e.g., less than three meters) or at night, unless participants are specifically trained for these situations.
- Participants are not to collect any natural objects or relics while diving unless an appropriate license has been obtained. If picking up anything like this to show others, it must be replaced where it was found.
- Participants should be instructed re: any hazards in the area (e.g., strong currents, dangerous marine life).



Supervision

- On-site supervision.
- One supervisor must remain out of the water, maintaining constant watch of the dive site. The individual must have snorkeling equipment accessible.
- Participants must scuba dive with a buddy.
- Check off participant's names as they enter and when they leave the water.
- Ratio of one certified scuba diving instructor to ten participants in a pool maximum (1:12 if a trained assistant is present), and six participants or less per instructor for open water diving (1:8 if a trained assistant present).
- Complete dive log after each dive.

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Surfing/Bodyboarding/Bodysurfing/Skim Boarding

Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the material in the subsection General Considerations for all Aquatic Activities in Section 7 (Adventure Pursuits Activities).*
- If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Aquatic Activities.

Additional Known Potential Risks

- Injuries related to slips, trips and falls on the board or as a result of wearing fins;
- Injuries related to collisions – with movable (e.g., other boarders/boards or one's own board) or immovable (e.g., rock) objects;
- Injuries related to board capsize or falling off of board;
- Injuries related to equipment malfunction (e.g., board breaking) or becoming tangled in apparatus (e.g., tether); and
- Being swept under or out to sea due to strong undertow currents or rip currents or struck by large waves.

Leader Readiness

- The instructor/leader must be competent to organize the surfing/skim boarding activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- If the participants are to surf in water more than chest deep and are not wearing PFDs, then a certified lifeguard or a lifesaver (Bronze Medallion) with CPR and experience in relevant water rescue must be present. If the participants are only to be surfing in shallow water or while wearing PFDs, then the criteria for *Open Water Swimming* should be followed.



Equipment/Location

- Ensure participants have equipment that is not damaged in a manner that renders it unsafe (e.g., fins, surfboards /bodyboards/skim boards).
- If the participants will be venturing into water more than chest deep, all non-swimmers or very weak swimmers must wear a PFD.
- In Canada most surfing is done while wearing wetsuits or drysuits. Ensure these fit appropriately for comfort, functionality and maneuverability.
- The instructor/leader must be familiar with the surfing site from previous reconnaissance;

Instruction

- Parents/guardians should be asked to verify the level of swimming training/skill the participant has.
- If the swimming ability of a participant is unknown, before being permitted to participate in water above their chest height without a PFD the participant should be given a **survival swim test** (roll in, tread 1 min., swim 50 m. any style without PFD or goggles) or **endurance swim test** (50 m. swim any style). The selected test will generally be conducted by the lifesaver or may be conducted by another leader as long as it is undertaken in shallow water only and with little or no current present.
- Participants should be introduced to basic skills related to safe participation in the activity and environment selected. This may include:
 - equipment checks
 - swimming with fins
 - entry and exit methods
 - techniques of “catching a wave”
 - how to avoid collisions with other surfers/skimmers
 - staying with group and dangers of not doing so
 - respecting marine life (animals, plants, corals, barnacles)
 - rescue techniques.
 - “reading the water”, including knowledge about tides, current and waves for the local region.

Supervision

- On-site supervision.
- One supervisor is to remain out of the water for shore supervision.
- In open water, there must be at least two adult supervisors present, one of whom is the leader responsible for the group. Consider the size of the surfing/skim boarding area, presence of any currents/other hazards and maturity of participants in establishing ratio; approximately 1:4 is common for surfing and 1:10 for skim boarding.
- Use a buddy system.

See **Aquatics** for other considerations.

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Whale Watching

Age 8+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Boating in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Powerboats and Sailboats.

Instructor/Leader Readiness

- The instructor/leader must be competent to organize the whale watching activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the whale watching trip is to be, the more knowledge, skill, fitness and experience the lead instructor/leader must have.
- At least one instructor/leader should have training from Canadian Power & Sail Squadrons and hold a Pleasure Craft Operator Card.
- The certifications required to operate commercial vessels is dependant on the size of the craft and can be found in the publication Small Commercial Vessel safety guide by Transport Canada, Office of Boating Safety.
- If using the services of a commercial whale watching operator, ensure that the operator has met the requirements for a certificate of operator proficiency from Transport Canada.
- Assistant instructors/leaders should be competent boaters experienced with piloting the type of craft to be used and on the type of water anticipated.
- All instructors/leaders must be capable swimmers, with PFD on.



Equipment/Location

- A vessel used for whale watching as well as other group and personal equipment should be selected for its appropriateness for the participants, maintained and repaired as appropriate and inspected for defects prior to use.
- Vessels are regulated by Transport Canada, Office of Boating Safety. On-board equipment requirements are determined by the length of the vessel, and whether that vessel is considered a pleasure or commercial craft. Clarify this before setting out in unlicensed craft.
- Commercial Whale-watching vessels used for carrying passengers must obtain Transport Canada permits to operate, including a commercial safety inspection. Confirmation of current permits is advisable.
- Each boat must have sufficient built-in buoyancy to support boat and crew if swamped.
- Participants should wear appropriate shoes with a non-slip sole (e.g., running shoes).
- Laws and regulations currently in effect in Canada under the *Federal Fisheries Act*, and in the USA under the *Federal Marine Mammal Protection Act* (if passing intentionally into US waters). These acts are in place to protect marine wildlife and should be followed at all times while engaging in marine animal viewing. The Whale Watch Operators Association Northwest, which includes both Canadian and American members (WWOAN), has developed a set of “Best Practices Guidelines” which can be accessed via their website to ensure the responsible management of vessels in the presence of marine wildlife. See <http://www.whalewatching.com/>.

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C. WINTER-BASED ACTIVITIES



General Considerations for Winter Activities

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and/or falls;
- Injuries related to colliding with another person or with a fixed object;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Eye damage resulting from snow reflection, cold and/or wind;
- Weather changes creating adverse conditions (e.g., extreme temperatures, storms);
- Hypothermia, frostbite or other cold injuries due to insufficient clothing, hydration or care;
- Loss of hand dexterity in cold or wet weather;
- Hyperthermia (overheating) due to overdressing, overexertion and/or poor hydration;
- Equipment related injury (e.g., due to poor fit, improper adjustment, improper use, and/or malfunction of equipment, and/or entanglement in equipment);
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Injuries related to encounters with animals in the environment;
- Allergic reactions to natural substances in the environment or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

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Additional Challenges of Activity in a Cold Environment

- Decreases in body temperature; the colder it is out, the faster the loss.
- Faster cooling of skin wet from sweating or precipitation.
- Magnification of the loss of body heat in the wind, especially if the skin is wet.
- Greater perception of the cold in environments with higher humidity.
- Frostbite of extremities (e.g., nose, ears, toes, fingers) can lead to long term tissue damage.
- Compromise of brain function in severe cold, contributing to increased chance of injury.
- Dehydration in dry cold environments, due to water loss through respiration and sweat.
- Increased injury susceptibility of muscles, ligaments and tendons when they are cold.
- Children get cold faster than adults and suffer frostbite more easily. They may lack of experience in the cold and forget to stay well-dressed; e.g., removing toques, tubes, mitts, and/or getting these items wet while playing so they do not function as well.

Leader Readiness

- The instructor/leader must be competent to organize the activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the winter activity is to be, the more competent the instructor/leader must be.
- Before taking participants out in remote areas, the leader must have training and experience in winter survival, navigation and group management in this context.
- The instructor/leader must know how to prevent, recognize signs and symptoms and treat common cold related illnesses and injuries (e.g., hypothermia, frostbite).
- Assistant leaders must be comfortable outdoors in winter and have had sufficient experience in the activity to help support the group.

Equipment/Location

- For any site, participants should be made aware of the boundaries for the activity.
- When choosing a site, consider the environmental conditions (e.g., sun, wind, wind chill, snow conditions and suitability of terrain). Try to select areas/routes that are relatively protected from the wind unless participants are well-dressed for more exposed conditions.
- When the weather is cold, try to plan activities around mid-day, when temperatures may be warmer.
- Be aware that the temperature tends to drop quickly as soon as the sun sets.
- Appropriate layered clothing should be worn (e.g., synthetic or wool close to skin to wick/hold moisture away, fleece or wool in a second layer for warmth, and a wind/water repellent layer (ideally breathable) on the outside).
- Where possible, avoid cotton clothing (e.g., jeans, hoodies, sweatsocks), especially on extended day trip or longer outings. If participants are planning to wear cotton, encourage them to bring one or more changes of the cotton items, depending on the intended duration of the outing. If a participant gets very cold some distance from shelter, have them change into dry clothing.



- Avoid excessively restrictive clothing (e.g., tight boots or gloves); body parts with restricted circulation are more subject to frostbite.
- Headgear and gloves/mitts should be required for anything beyond class instruction on a local site in mild conditions. Over 50% of body heat can be lost through the head and neck. Ears, noses and cheeks are subject to frostbite, so keep them covered when it is cold.
- Be aware of risks related to skiing (cross-country, alpine, telemark), snowboarding or snowshoeing with bindings that do not automatically release in the event of a fall or other emergency. Participate in control.
- Groups traveling in the backcountry must be self-sufficient. Consider daylight hours, average mean temperatures and snow depth (e.g., for skis, snowshoes, etc), and time to prepare participants in deciding when to hold a winter backcountry trip.
- Participants must be very well prepared (e.g., knowledge, skills, clothing, equipment, health and fitness) before engaging in overnight and particularly extended winter tours into remote areas.
- Refer to organization board policy regarding temperature/weather conditions.
- Winter travel generally takes longer than summer, so distances planned should be conservative. Consider the challenges of traveling with a pack in snow, daylight time needed to set camp, and potential for significant temperature drop at dusk.

Instruction

- Include additional warm up for an active session in the cold. It requires more time to get the body ready for higher intensity activities in cold weather than in warm.
- Instruct participants that they are responsible for notifying a supervisor if they feel too cold to continue an activity.
- Encourage participants to put on and take off layers of clothing in order to stay warm and dry (e.g., avoid sweating). Add a layer when stopping to rest to avoid getting chilled.
- Keep well hydrated during active outings.
- Encourage participants and parent/guardians to consider the combined effect of cold and wind when planning what to wear for an outdoor session.
- Discuss frostbite and hypothermia with participants and how to prevent, recognize and treat (at an age-appropriate level). Identify and deal similarly with other winter related injuries (e.g., snow blindness) as relevant to the participants, activity and environment.

Supervision

- In-the-area supervision.
- Constant visual supervision where a participant is crossing a potentially hazardous point on the route.
- Ratio as per calculation.
- A buddy system should be used whenever appropriate, with buddies checking each other for signs of hypothermia, frostnip, etc.

Section 7–104

Additional Considerations for Travel in Avalanche Terrain

Avalanche Related Leader Readiness

- If traveling in potential avalanche terrain, at least two leaders must have basic avalanche training/certification from a provider recognized by the Canadian Avalanche Association.
- Parks Canada has specific regulations regarding custodial groups traveling in the four mountain parks. A “custodial group” means a group affiliated with an institution, where at least one person is below the age of majority and that minor is not in the company of his/her parent or legal guardian. Institutional custodial groups include school groups, Scout/Guide groups, church groups, cadet groups and community youth groups. Over 250 trails in the parks have been rated into one of three categories. While youth activity leaders may continue to lead youth on trails rated as Level 1 Simple (minimal avalanche exposure), they must hire an Associated Canadian Mountain Guide (ACMG) or International Federation of Mountain Guides Associations (IFMGA) certified mountain or ski guide with a valid permit to go on Level 2 (Challenging) routes, and they may not take custodial groups into Level 3 (Complex) terrain.

Avalanche Related Equipment/Location

- Participants should generally not be taken into avalanche terrain. Only with a strong base of training, skills and experience, may they be taken into terrain with low to moderate avalanche potential, but this travel must not be undertaken when the avalanche hazard is above the moderate level. Informed parental/guardian support is essential in such contexts.
- Avoid traveling in mountain backcountry the day after a big storm; avalanche hazard will be higher until the snowpack settles.
- Be aware of the terrain, snowpack and weather and select appropriate routes that minimize exposure of the group and individuals. Watch for potential indicators of avalanche (e.g., signs of recent avalanche activity) or other hazards.
- If traveling in potential avalanche terrain, all group members must carry:
 - an avalanche transceiver (457 KHz compatible),
 - an avalanche probe or avalanche probe ski pole, and
 - an appropriate (i.e., very strong) shovel.
- Everyone must be trained and competent at a basic level in the use of these items.



Avalanche Related Instruction

- Often when skiing or snowshoeing, certainly in the mountains, but also potentially in any relatively steep terrain, a group may cross one or more small local features (e.g., open or sparsely treed slopes, gullies, embankments) that could produce a snow slide. Any avalanche may cause injury and even small slides can be dangerous. Instruct participants to be aware and treat snow with respect.
- If traveling in potential avalanche terrain, participants must be mature enough to appreciate related risks and must be trained in:
 - appropriate route selection,
 - slope assessment,
 - safety procedures for crossing suspect terrain, and
 - emergency procedures, including basic avalanche search and rescue.

Avalanche Related Supervision

- Constant visual supervision where a participant is crossing a potential avalanche slope.
- Group size of 12 maximum is recommended if traveling in avalanche terrain.

Section 7–106

Winter Camping

Local

Age 9+

Frontcountry/Base

Age 10+

Remote/Extended

Age 12+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the relevant material in the subsections Camping & General Considerations for Winter Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Winter Activities and to Camping.

Leader Readiness

- The leader must be competent to organize the activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. This includes having sufficient relevant winter camping experience in recent years for competence and confidence.
- Assistant leaders should have had some winter camping experience and must be comfortable outdoors in winter.

Equipment/Location

- If sleeping in tents, snow shelters or other unheated structures, ensure participants and parents/guardians are aware of the need to bring the following items and inspect them prior to departure:
 - four season sleeping bag or equivalent (e.g., two good summer bags, one inside the other).
 - sleeping pad for under sleeping bag.
 - appropriate clothing for weather conditions, including a warm, dry change(s) of clothing and extra insulating layers plus headgear, mitts/gloves and warm boots).
- Recognizing the added challenges related to moving around in the snow, select campsite area with minimal impact in mind. Get off of trail a reasonable distance. Ensure appropriate separation of eating/sleeping areas, latrine or catholes, food hanging areas (if used) and identifiable watercourses.



Instruction

- Participants should have basic competence in warm-weather camping before being taken winter camping.
- Heat loss principles and clothing systems should be taught/reviewed.
- Encourage the consumption of adequate fluids as dehydration contributes to hypothermia, frostbite, etc.
- Participants should be instructed regarding the importance of keeping things they are leaving outdoors up off the ground and/or in places where they will be readily located in the event of an overnight snowfall.
- If and as relevant to the group, program and selected environment, participants involved in extended winter travel should be instructed in basic outdoor winter survival techniques (e.g., fire lighting, snow shelter construction, signaling for help).
- It is very important that participants can get and stay warm at night. If not, they will not sleep well and, particularly on a multi-day tour, become fatigued and more accident prone as the days go on. For example, encourage them to work to keep their sleeping bag dry in their tent or snow shelter, to keep a toque and scarf or tube on through the night to minimize heat loss from the head and neck, to keep well-hydrated and well-fed, and to take whatever other steps are necessary to sleep snug and warm.
- If snow shelters are to be constructed (e.g., quinzees, snow caves, igloos):
 - Ensure snow is sufficiently deep and packed to avoid collapse and ensure that sufficient ventilation is maintained. Ensure no participants will be buried during the construction phase (e.g., use a buddy system where only one of each pair is in the shelter at one time). Collapse snow shelters after use if their presence could pose a hazard to future visitors to the area.
 - Do not allow the use of stoves or lanterns in snow shelters because of the potential build-up of carbon monoxide.
 - If candles are to be used in snow shelters, instruct participants to place them in safe places well away from sleeping bags, ground sheets or other flammable objects. It is best if candles are placed in enclosed candle lanterns. Remind participants to extinguish candles before going to sleep or exiting the shelter.

Supervision

- In-the-area supervision.
- Ratio as per calculation.
- Conduct more frequent early night checks in colder weather to ensure participants are warm enough, especially with younger participants.

Section 7–108

Cross Country Skiing

Day Tripping (> 3 hours)

Age 10+

Overnight Touring

Age 12+

Extended Touring

Age 14+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities; e.g., Cross Country Skiing) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the relevant material in the subsection General Considerations for Winter Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Day Tripping (> 3 hours): all relevant elements of Cross Country Ski Day Tripping in Section 5, plus:

Equipment/Location

- Select a conservative route (e.g., one with escape routes and/or near shelters/cabins for lunch), particularly with novice participants on longer outings. Consider time available till dusk, prevailing and forecasted weather and snow conditions.
- Bring a thermos of hot drink for emergency use.
- Participants should be encouraged to dress in layers and bring a back-up pair of gloves/mitts.

Instruction

- Discuss appropriate spacing of skiers.
- Have participants ski under control at all times to prevent collisions.
- Participants should remove pole straps on steeper downhill runs where the trail is narrow and vegetation is close to the sides. Snagging baskets in shrubs/trees can cause shoulder dislocations.
- If skiing off-trail, provide training relevant to the hazards present in the environment (e.g., information and warnings about tree wells).
- Participants with chronic knee, foot or other relevant limitations should not participate in ski tours, particularly in the backcountry and/or with a pack, where an exacerbation of this pre-existing condition could endanger them or the group.



Supervision

- In-the-area supervision; constant visual if dealing with a specific hazard.
- Ratio as per calculation.
- Use a buddy system, as well as a lead/sweep system and/or other appropriate techniques to keep group together.
- Rendezvous at trail junctions, especially if unsigned, to ensure no one goes the wrong way. Do head counts before heading off again.
- Create a system for appropriately spaced regrouping stops if the participants are prone to getting too spread out along the trail (e.g., due to widely varying fitness levels and/or objectives) and/or to provide time for clothing adjustments, and water/snack intakes.

Overnight/Extended Ski Touring: *all of Day Tripping above, plus:*

Leader Readiness

- If touring overnight or longer, assistant leaders must have strong intermediate or above ski touring and current winter camping knowledge, experience and skills.

Instruction

- Instruct participants regarding appropriate packing of their backpacks and adjusting their backpacks for proper fit.
- Instruct participants regarding safe procedures for donning and taking off heavy backpacks, especially considering doing this while wearing skis. Encourage buddy assistance.
- Teach participants how to fall and rise while wearing a pack and skis (e.g., when and how to remove their packs rather than trying to stand up with them on).
- Provide appropriately detailed explanations of hazards encountered and procedures to follow that participants understand the hazard and what they are to do, including contingencies. The potential impact of some hazards can be much more significant when the weight of a loaded pack and skis are added.
- If touring in untracked snow, ensure participants have sufficient strength and endurance to break trail without exhausting themselves, or adopt strategies to compensate (e.g., short shifts in front, breaking trail without wearing a pack and going back for it after turn in front).
- On mountain ski tours when descending over a long distance, describe/discuss the potential tendency for the group to get excessively spread out, and ensure all are aware of the need to stay between the lead and sweep and to stop and wait at all regrouping locations en-route. Select regrouping spots with care, recognizing the difficulty participants may have stopping with loaded packs on downhill slopes.
- Avoid travel in darkness except for emergencies. Try to select a camp spot with sufficient daylight left to get camp set before nightfall. Accidents tend to happen at the end of the day when people are tired on the trail and while setting up camp and preparing dinner.

Supervision

- In-the-area supervision.
- Ratio determined by calculation.

See **Winter Camping** for other considerations.

Section 7–110

Biathlon

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of this document.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity or outing I am planning.*
- I have a solid understanding of all the relevant material in the subsection General Considerations for Winter Activities and Cross Country Skiing in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Suffering an injury while alone on a route/trail;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it;
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;
- Loss of manual dexterity in hands during cold and wet weather;
- Injury or delay related to equipment malfunction, failure to use the equipment properly or becoming tangled in apparatus;
- Hypothermia frostbite or other cold injuries due to insufficient clothing;
- Hyperthermia (e.g., heat exhaustion, heat stroke) due to insufficient hydration, overdressing and/or overexertion;
- Illness related to poor hygiene;
- Injuries related to poorly fitting or improperly adjusted equipment;
- Acute or overuse injuries/conditions;
- Injuries related to colliding with another person or with a fixed object;
- Injuries related to use of firearms; and
- Psychological injury due to anxiety or embarrassment (e.g., re: body size or shape);
- Other risks normally associated with participation in the activity and environment.



Leader Readiness

- The instructor/leader must be competent to organize the activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the biathlon activity is to be, the more competent the instructor/leader must be.
- The Activity Leader must know how to prevent, recognize signs and symptoms and treat common cold related illnesses and injuries (e.g., hypothermia, frostbite).
- Assistant leaders must be comfortable outdoors in winter and have had sufficient experience in the activity to help support the group.
- A leader must have knowledge, training and experience with the firearms in use for the activity.
- Training and certification must be secured through Biathlon Canada, Biathlon Alberta or other appropriate sources. Because of the presence of firearms, a certified instructor must direct this activity.
- Anyone transporting firearms must have a firearms license.

Equipment/Facilities

- This activity should be introduced through the use of air rifles. Only experienced participants twelve years of age or older should be permitted to use 22s.
- Only ammunition authorized by the Biathlon Alberta should be used.
- Beginners and youth younger than 12 will not carry rifles while skiing.
- Unless otherwise specified, the team coaches/leaders will provide ammunition on the firing point. Participants under age 12 are not to carry ammunition while they ski.
- In races and practice a misfired round will be ejected. The participant will ask for a new round by raising their hand. A new round will be passed to the participants by the coach or through an official if at a competition.
- Safety glasses or shatterproof eye glasses should be worn when firing 22s.
- Participants should wear hearing protection when using 22s or close to others firing 22s.
- Encourage participants to dress appropriately, including consideration of how warm they will get while skiing and how cool it may be laying on ground mats while shooting.
- An appropriate site must be selected that eliminates potential for any participant or other to be injured by ricocheting pellets or bullets. An established biathlon range must be used if 22s are to be used.

Section 7–112

Instruction

- A rifle (air rifle or 22) must always be treated as if it is loaded.
- A rifle must never be pointed at anyone.
- An uncased rifle must be held in the vertical position with the muzzle pointing up when transporting it to and from the firing point and/or range.
- When in the firing position, a rifle must always point down range toward the targets.
- Fingers must be kept off the trigger unless the marksman is ready to fire.
- Any participant committing a safety violation causing imminent danger to him or herself or others will be removed from the activity. There is zero tolerance for horseplay with rifles, whether loaded or not.
- A set of verbal commands and flags will be developed and used on the range at all times to identify when the range is open and when it is closed. No one may go past the firing line when the range is open.
- For novices and participants under 12 years of age, all firing is done in the prone position.
- Participants carrying rifles must do so with them unloaded with the barrel pointing up.

Supervision

- On-site supervision. Close visual supervision of individuals new to shooting and/or in early attempts with 22s.
- An instructor or coach will generally not supervise more than six participants at a time. If the participants are under 12, at least a 1:4 ratio is recommended.



Snowshoeing

Day Tripping (> 3 hours)

Age 10+

Overnight Tripping

Age 12+

Extended Tripping

Age 14+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities; e.g., Snowshoeing) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the relevant material in the subsection General Considerations for Winter Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Winter Activities.

Snowshoe Day Tripping (> 3 hours)

All relevant elements of Snowshoeing in Section 5, plus:

Equipment/Location

- While snowshoeing, groups will tend to venture off the beaten track more. The leader must be very aware of route selected, conscious of avalanche hazard on micro-slopes, etc.
- Select a conservative route (e.g., one that parallels a road, near shelters/cabins for lunch), especially with novice groups.
- Have a thermos of hot drink for emergency use.
- Participants should be encouraged to dress in layers and bring a second pair of gloves/mitts in case their first pair gets wet.

Instruction

- Instruct participants regarding hazards encountered and how to manage these.
- Participants with chronic knee, foot or other relevant limitations should not participate in snowshoe hikes or, particularly, backpacking or snowshoe–toboggan expeditions where an exacerbation of this pre-existing condition could endanger them or the group.
- Inform participants about potential overuse injuries caused by inappropriate snowshoeing technique (e.g., groin, knee and ankle injuries caused by walking with feet too far apart for extended distances). Teach them to walk efficiently. Be prepared to modify the activity if one or more participants suffer an overuse injury.

Section 7–114

Supervision

- Ratio as per calculation.
- Use a buddy system, as well as a lead/sweep system to keep group together.
- Rendezvous at trail junctions, especially if unsigned, to ensure no one goes the wrong way. Do head counts before starting out again.

See **Cross Country Skiing** and **Winter Camping** for other considerations.



Alpine (Downhill) Skiing • SnowBoarding

Age 8+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the relevant material in the subsection General Considerations for Winter Activities in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to General Considerations for Winter Activities), plus:

- Injuries related to colliding with another person or with a fixed object (e.g., tree, lift tower); and
- Injuries related to being caught in an avalanche if in mountainous terrain (especially if going out of resort area or if in mountainous backcountry terrain).

Instructor/Leader Qualifications

- The instructor/leader must be competent to organize the skiing or snowboarding activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Frequently, a youth-serving organization will employ service provider instructors at an established ski area.
- Before contracting with a ski area service provider, ensure that they/their staff are members of their respective national certifying body (e.g., Canadian Ski Patrol, Canadian Ski Instructors Alliance, Can/West Ski Area Association or Canadian Association of Snowboard Instructors).
- Training may be secured through the Canadian Ski Instructors' Alliance (CSIA), Alpine Canada Alpine, Canadian Association of Snowboard Instructors, Canadian Freestyle Ski Association, Canadian Ski Council, Canadian Ski and Snowboard Professionals, Canadian Snowboard Federation, Alberta Alpine Ski Association, Alberta Freestyle Skiing Association, Alberta Snowboarding Association or other appropriate sources.
- The instructor must be comfortable on skis and able to demonstrate falling and rising, braking and turning in control on the terrain used.
- Assistants must also be comfortable on skis in the terrain they will be skiing and being outdoors in winter.

Section 7–116

Equipment/Location

- Parents/guardians/participants (gear brought from home) or service providers (providing rental gear) are responsible for ensuring all bindings meet with current approved guidelines and that boots and bindings are thoroughly compatible.
- All bindings must be in working order and set to the proper tension by a qualified technician. For equipment brought from home, if on-site technicians will not do this on arrival, direct parents/guardians/participants to get it done prior to the class/event. Youth program leaders are not responsible for checking that this has been done or for otherwise inspecting or testing participants' equipment.
- Parents/guardians or service providers are responsible for ensuring that appropriate devices (e.g., ski brakes, snowboard leashes) are used to help prevent runaway equipment.
- If bringing ski/snowboard equipment from home or organization base to an off-site area, be aware that some buses (e.g., school buses) may not permit skis and poles or snowboards in the bus; order a bus with under bus storage or arrange an alternative method of getting gear to the site.
- Where working with a service provider ski area, confirm the on-site procedure with area contact. Generally, resort area staff:
 - meet and greet the participants (on or just off the bus);
 - explain the area procedures, rules, lifts operating, snow conditions and trails open;
 - provide trail maps to participants (if appropriate);
 - organize where the group can store its things;
 - organize participants for rental equipment;
 - organize groups for skier/rider skill assessment and group participants for lessons;
 - provide lifts, lessons, ski patrol and concession services;
 - tell the participants where to go if they lose their group; and
 - provide equipment return and departure instructions.
- Lift tickets should be attached to a pocket zipper or other suitable spot visible by lift attendants. They should not be able to flap up in the skier's face/eyes.
- Have an adult supervisor observe participants who are to use a lift for the first time. Where appropriate, consider asking the lift attendant to reduce the speed of a lift for younger participants, physically awkward participants, and/or those using the lift for the first time.
- Only commercially operated ski/snowboards facilities with suitable teaching areas (i.e., including one or more gentle slopes) should be used. The area should be patrolled by facility staff or members of a recognized ski patrol group.
- Define specific boundaries for the activity, whether at a commercial or non-commercial site.
- If skiing/boarding at a large resort (e.g., in the mountains), encourage or require (as appropriate) participants to carry a trail map.
- Participants should be divided by ability level (through ski-off assessment and/or parent/guardian's written classification) and then allowed on hills/trails commensurate with



their skills and experience. Parent/guardians' written descriptions of the participants' levels help the ski area determine roughly how many classes at each level they need to be prepared to provide.

- NON-SKIERS (never skied/boarded before) and NOVICES (minimal experience and control on skis/boards) should receive a lesson prior to any access to any lifts and runs (i.e., free skiing/boardings). BEGINNERS (good control on novice hills), INTERMEDIATE (good control on a variety of hills) and ADVANCED (experienced and competent skier/boarder) participants may be allowed some free-ski/board time prior to their lessons, but only on hills within their capacity.
- Any skier/boarder except an ADVANCED participant may be re-assessed and upgraded over the day as they improve. Some resorts will mark the upper limit of lifts or runs a participant may use on his or her ticket. ADVANCED participants may be provided a special marking (e.g., a piece of surveyor's flagging tape as an advanced lesson) to denote their access to more challenging terrain and/or an advanced lesson.
- When choosing a site for group lessons, consider sun, wind and snow conditions as well as suitability of terrain.

Instructional Considerations

- Participants should be led through a warm-up to reduce the potential for injury or residual muscle soreness.
- Remind participants of the dangers of skiing/snowboarding out of bounds.
- Participants should not engage in hot-dogging or jumping activities.
- Familiarize skiers/riders with the **Skier's Responsibility Code** (before going and/or on-site) and require them to follow it:
 - Ski/ride in control; be able to stop or avoid other skiers/riders or objects at all times.
 - People ahead of you have the right of way; avoid them.
 - Do not stop where you obstruct a trail or are not visible from above.
 - Look up before merging onto a trail.
 - Observe all posted signs and warnings. Keep off closed trails and out of closed areas.
 - Learn how to load, ride and unload from lifts safely prior to using them.
- Familiarize skiers/riders with the **Lift Use Guidelines** (before going and/or on-site) and require them to follow these guidelines:
 - Only use lifts you are approved to ride.
 - Observe signage at lift loading and unloading area and along tow path.
 - Refrain from horseplay while waiting in line or when on lifts.
 - Follow instructions of lift operator.

Section 7–118

When Using Surface Lifts:

- Remain in the tow path; avoid zigzagging.
- Unload only at designated area unless lift stops and ski patrol directs you to unload.
- If you fall, clear the path immediately, removing skis if necessary.

When Using Chair Lifts:

- Always use the restraining bar, if chair is so equipped.
- Remain seated with skis pointed forward and do not rock the chair.
- Never jump from a chair.
- If a chairlift stops, remain calm and wait till it restarts. Follow ski patroller directions in the event of an evacuation.
- Do not lift the restraining bar until signs or lift operator direct you to do so, take all of your belongings when dismounting the chair, and clear unloading area promptly.
- Prior to the activity day(s) discuss proper clothing, including headgear, mitts/gloves, tubes, insulating and protective layers (e.g., have participants visualize being stuck on a chairlift for an hour or more in the worst weather they can anticipate for the day).
- All participants should receive a ski or snowboard lesson, appropriate to their current ability.
- Participants should be aware of the option of taking off their skis/board and walking down the hill if conditions become unsafe.
- Participants should know that if they are involved in or witness a collision, they are to remain at the scene and identify themselves to the ski patrol.
- Participants should know that violation of ski area rules, the Skier/Rider's Responsibility Code or Lift Use Guidelines might result in loss of their ski privileges.

Supervision

- In-the-area supervision.
- Ratio as per calculation.
- A buddy system should be used, pairing skiers/riders of relatively equal skill and fitness.
- Leader should establish check-in times during the day for all participants.
- Duties of the supervisors should be clearly outlined, including circulating to all hills that participants are using for skiing/boarding and the ski lodge.



Snowmobiling

Activity Instruction	Age 10+
Day Tripping (< 3 hours)	Age 11+
Day Tripping (> 3 hours)	Age 12+
Overnight Tripping	Age 14+

Canada is a snowmobiling nation. But, snowmobiling is the second leading cause of recreation and sport related injuries to children and youth between ages 5 and 19, behind only cycling. While highly attracted to driving a motorized apparatus, young people tend to be under-equipped physically and psychologically to operate the machines.

While many youth-serving organizations refrain from participating in motorized activities, in many parts of the province, these activities are common. Recognizing the popularity of these activities, some youth-serving organizations may wish to take the opportunity to help instruct and model safe practise to youth in the community.

Planning for riding is an important factor in making a successful adventure, whether for the afternoon, day or camping overnight. Because the mode of transportation is mechanical and significant distances can be covered, riders should be prepared to stay overnight despite intentions to return before dark.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- I have a solid understanding of all the material in Section 3 (General Considerations for Youth Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Recreation Activities) pertinent to the activity I am planning.*
- I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- I have a solid understanding of all the relevant material in the subsection General Considerations for Winter Activities Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

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Known Potential Risks – all of General Considerations for Winter Activities, plus:

- Injuries related to colliding with another machine or with a fixed object;
- Injuries related to rollovers, falling off machine, or being thrown from the machine (e.g., due to speed, cornering, rough terrain);
- Injuries resulting from branches or other structures striking the rider;
- Cold injuries or other injuries caused by natural ice coverage breaking and person falling in cold water;
- Injuries related to being caught in an avalanche if in mountainous terrain;
- Complications of an injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Snowmobiling Activity Instruction

Leader Readiness

- The instructor/leader must be competent to organize the snowmobiling riding activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The larger the area and/or longer the riding activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- The leaders must be aware of and respect snowmobile related legislation in the province, as it relates to the riding activity and environment.
- All leaders and accompanying supervisors should be comfortable on the type of snowmobile and in the environment selected.
- The leaders should be very cognizant of their own riding habits and consciously work to be good role models (e.g., wear helmets, use signals consistently, avoid sensitive terrain).
- If going off-site more than 3 km, at least one leader should have some skill in basic repair and maintenance of the type of machines used.
- Training may be secured through the Alberta Snowmobile Association or other appropriate source.
- At least one supervisor should have first aid training, the level dependant upon the time/ distance from professional first responders (refer to *First Aid* in Section 3).

Equipment/Location

- Planning for sledding is an important factor in making a successful adventure, whether for the afternoon, day or camping overnight. Because the mode of transportation is mechanical and significant distances can be covered in a relatively short period of time, always go prepared to stay overnight despite good intentions.
- If personal machine, parents/guardians can be tasked with checking or having a mechanic check the snowmobile prior to participant using it in the activity to ensure it is in good working order (e.g., controls, brakes, lights, electronics, fluid levels including fuel).
- Registration and license plate, insurance documents on board,
- Safety equipment checked and aboard,
- Tool kit checked and aboard, and
- First aid kit checked and aboard.

Safety Equipment: flashlight, candles, Fox 40 whistle, tool kit, pocket knife, first aid kit, strobe, radio or cell phone for communications, high energy food/drinks, tow rope, waterproof matches, flares, extra batteries, extra key, axe and saw, reflective mirror, thermal blanket, florescent tape, spark drive belt and spark plugs, map and compass, extra socks/boot liners and mitts, metal cup or pot, shovel, 20 meters 10 mm nylon rope, emergency shelter, sleeping bag, avalanche transceiver and probe if in avalanche terrain, litter bags, and extra fuel.

Tool Kit: screwdrivers, locking pliers, wrenches, rags, electrical/duct tape, starter cord, spark plugs, spark plug socket, drive belt.

- Parents/guardians are responsible for outfitting their child/ward with correctly fitting appropriate helmets for snowmobiling activities, unless the youth-serving organization has assumed this responsibility. Helmets significantly reduce head injuries and are required by law for all minors in Alberta. Leaders must **STRONGLY ENCOURAGE** their use.
- Leaders should check that participants' helmet straps are properly adjusted and buckled and require participants to keep them on at all times while riding.
- Eye protection is important.
- Gloves are important for protection in a fall and from cold and/or wet weather.
- Use solid, stable, warm footwear; e.g., boots.
- Clothing worn should be comfortable and weather appropriate. The arms and legs should be covered. Light or bright coloured or reflective clothing and helmets are more visible.
- No earphones or cell phones while riding.
- Refrain from using after-market pipes that increase noise and annoy others.
- Snowmobiles have improved considerably due to oil injection, sound reduction measures, variable height exhaust valves, direct injection, on-board computers and

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4-stroke engines, encourage youth to embrace new technology which is environmentally friendlier.

- Select on-site instruction stations carefully in terms of natural boundaries (or set out pylons or other indicators). Consider ground surface and pedestrian or other traffic.
- Instruction of novice participants should be at a well-controlled site or route; avoid roads shared with motor vehicle traffic.
- Laws governing the operation of snowmobiles differ for private and public property. Ensure that youth are aware of and abide by them.
- In Alberta on public lands youth of 14 years or older may operate a snowmobile independently; youth younger than 14 must be accompanied by an adult.
- On private property, where permission has been granted by the owner, there is no license, registration, insurance or age requirement.
- Be aware of the unique and particular hazards associated with crossing ice (lakes, rivers).
- If traveling in mountainous areas, avalanche equipment and training is essential. See the [Adventure Travel Resource](#) for more information.

Instruction

- The relevant rules of the *Motor Vehicle Act* and *Traffic Safety Act* must be adhered to if going on roadways.
- Instruction may include, if/as relevant to the sledding activity and group:
 - clothing and footwear for riding,
 - familiarizing to the machine,
 - basic machine checks (as described above),
 - how to position oneself on the machine and how to shift one's weight during basic manoeuvres,
 - rules of the trail; reading and obeying trail signs,
 - staying alert (inattention causes accidents),
 - how to signal (e.g., hand signals) and carry out turns safely,
 - how to maneuver the machine (e.g., accelerating and decelerating, riding up and down hills, cornering)
 - anticipating and responding to terrain features; e.g., slippery sections, slopes, ditches, depressions, blind intersections like corners of buildings or heavily treed bush, wet surfaces, standing water, rocks, ruts etc.),
 - riding single file, leaving enough space to be able to dodge obstacles without endangering others,
 - signaling obstacles and traffic for those behind,
 - riding on designated trails and not on roadways; crossing roads safely,
 - passing others safely,
 - riding in a predictable manner; looking around before swerving, turning or changing lanes and signaling where appropriate,
 - staying alert and focused,
 - handling minor equipment problems,



- efficient driving technique,
- basic machine maintenance (e.g., cleaning) and repair (e.g., changing a tire), and
- how to fall off a trail bike/put the bike down safely.
- Instruct youth progressively (e.g., how to stop before how to start, riding slowly but correctly).
- With inexperienced riders, an initial riding pretest (safety emphasized) may be given before leaving the start area (e.g., starts, stops, turns, signals, communications).
- Encourage youth to know their abilities and skill level.
- Youth should not ride with a passenger, especially another child.
- Exercise common sense, ride with care and caution at safe, reasonable speeds. Riding a snowmobile is not like being in a car; there are no frames, seatbelts or airbags to protect the rider.
- Encourage youth to make eye contact with drivers they meet and assume that they have not been seen until acknowledged.
- Be respectful of other riders; e.g., safe following distances, yield as appropriate at intersections, yield to those coming uphill).
- Be respectful of the environment, and of private and public property, and don't litter.
- Be respectful of wild and domestic animals and give them their space.
- Avoid riding in environmentally sensitive or protected areas.
- As with other sports a code of Ethics, Code of Conduct or Riders Pledge should be in use by all participants to encourage safe responsible riding practices.
- Racing should generally not be done, except where participants have been trained how to race and demonstrated they can race safely and an appropriate site is used.
- Avoid alcohol and drugs before and during the sledding activity. Youth should be aware that many deaths and permanent disabilities have happened while riding on snowmobiles when someone's judgement has been compromised in this way.

Supervision

- In-the-area supervision.
- Ratio as per calculation if off-site (See **Section 3**).
- A designated leader stays at the front of the pack to set an appropriate pace, and the sweep stays at the back of the pack. If there is a change in trail direction, the leader should ensure no one misses the turn.

See Alberta Snowmobile Association for Alberta Sled Smart Safety at www.altasnowmobile.ab.ca

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Snowmobiling Day Trip: *all of Activity Instruction, plus:*

Equipment/Facilities

- If going off-site, choose routes carefully in terms of the length, grade and consider the presence/frequency of traffic, complex intersections, and/or other hazards.
- Prior to initial use of an unfamiliar route, leader or designate pre-travel the route or seek other reliable information to secure an estimate of the time needed, trail conditions, hazards present, and appropriateness for the group.
- Be particularly conservative regarding distance and time estimates when a mechanical breakdown, pending darkness or other problem may affect success and safety. Trips can cover substantial distance, so it is easy to be quite far from home base.
- Avoid riding off-site at night. If riding at dusk, reflective strips on the machine frame, clothing, use of a headlight, a red taillight and/or red reflectors on the rear of the machine increase visibility.
- Riders need a good layer(s) of clothing for wind protection if it is cool out; riders lose heat through convection (air moving past body carries body heat away).
- The first aid kit should include large gauze pads and bandages to cover major road rash.
- If it is necessary to transport snowmobiles (other than parents/guardians bringing them to the site), select an appropriate mode of transport for the machines (e.g., trailers). Check any trailers used for loose bolts and ensure lights are functioning.

Instruction

- If sharing the trail with other recreational users (e.g., walkers/joggers, hikers, horse riders), ensure that riders are familiar with protocols for safety and courtesy (e.g., ride under control and at slow speed; make verbal contact, especially if coming up behind someone; wait for an appropriate acknowledgement and time to pass safely).
- Instruct participants to get themselves and all of their gear well off the road or trail when resting, having lunch, or stopping for any other reason.
- Because of convection effects, riders may dehydrate more quickly than hikers or others working at the same intensity. Participants should be encouraged to carry water, and to drink often (e.g., give reminders at break stops and model by drinking frequently).

Supervision

- In-the-area supervision generally.
- Constant visual supervision if participants are dealing individually with a specific significant hazard encountered on the trail (e.g., crossing a road).
- Ratio as per calculation (See *General Considerations for Youth Activities* in **Section 3**).
- Lead and sweep supervisors should carry communication equipment (e.g., walkie-talkies, FRS, cell phones) to facilitate communication between them, or create a relay system to pass messages up and back.



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Section 8. Travel Excursions

Most of the planning, preparation, leadership and emergency procedures relevant have been covered in the preceding sections of this document (Sections 1–7). Review, and adapt the guidelines provided in these sections while considering particulars of the destination, duration of journey and stay, activities to be undertaken, and particulars of the group. All out-of-province guidelines provided below will also apply to exchange trips and international travel situations. Additional specific guidelines follow for exchanges and international travel.

Out-of-Province Travel

Travel out of one's home province, but still within Canada, is an important way for youth to learn about and appreciate their country.

Planning and Preparation

- Follow all organization policies and procedures related to securing any necessary approvals for out-of-province or other distant travel within one's home province. Be aware of and respect proposal submission schedules. The process will typically involve submission of a preliminary proposal outlining the desire or intent to travel and parameters of the trip (who wants to go where, why, for how long, by what means will they traveling, and how will the trip be paid for). Then, assuming the trip has received preliminary approval to proceed, the leader should expect to be required to submit a copy of the more detailed trip documentation (e.g., final itinerary, travel details, copies of all relevant travel documentation (see below) with sufficient time for the office granting final approval to review the package and request and receive any items missing prior to departure.
- Parents/guardians must be given the opportunity to determine if the proposed trip will be reasonably safe for their child. They must be invited to a pre-trip information meeting or equivalent (e.g., conference call, one-on-one calls, email conversation) to inform them of:
 - the trip logistics,
 - routes and destinations,
 - program and activities,
 - inherent risks,
 - behavioral expectations and consequences,
 - communications systems,
 - insurance,
 - safety plan,
 - supervision and child protection procedures,
 - budget/fundraising/payment schedule,
 - parent/guardian agreement to assume the trip expenses (total trip budget as well as their child's expenses), except where other sources of funding off-set costs,
 - trip cancellation or participant withdrawal policies and procedures,
 - contingency plans, and
 - emergency plans.

- Parents/guardians must have the opportunity to ask questions and receive responses prior to signing acknowledgement of risk and consent forms.
- Keep the group size manageable (less than 20 is suggested) and determine an appropriate number of supervisors, based on the capacity of the supervisory team and group, the destination/ environment and activities to be undertaken.
- At least one supervisor should have some experience supervising a similar group in a similar environment.
- Inform parents/guardians if any unscreened adults will be supervising participants without a screened leader or supervisor present.
- Where a reconnaissance visit is not possible, gather current information about the area from a cross-section of appropriate sources (e.g., travel agents or tour operators, the Internet, guidebooks, others who have visited, local authorities).
- If traveling to participate in a convention, organizational special event (e.g., Jamboree), attend a performance, etc., confirm reservations/tickets/attendance and accommodations prior to booking airfares.
- If traveling to an organization special event (e.g., national conference or Jamboree type of event), secure information from the organizers about ground transportation, accommodations, meals/cooking arrangements, what to bring, and other relevant information.
- Ensure the group has credit cards, traveler's cheques, and cash. Plan in a contingency fund to handle emergencies.
- If staying in hotels/motels/inns or hostels, pre-book accommodations. Use guidebooks, CAA/AAA diamond ratings or other reliable comparison guides, websites, and/or word of mouth of others who have used the accommodations to select an appropriate site for the group.
- Plan phone check-ins and a phone tree (fan out) or other system for getting updates to the families of group members, as safety backup and to minimize worry at home.
- If traveling to a community where English is not commonly spoken (e.g., a French speaking community, an Inuk community), at least one adult supervisor should be able to speak enough of the local language to hold a basic conversation and know what to say in an emergency. If not, secure a local guide or host.
- If traveling to a significantly different part of the country, at least one supervisor should be familiar, at a lay level, with the laws and culture of the destination. If not, secure a local guide or host.

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Health Considerations

Inform group members of the following, as relevant to the travel excursion:

- maintain high standards for personal health, hygiene and cleanliness;
- get sufficient rest and sleep;
- prepare to need time to acclimatize if entering radically different climactic, landscape and/or cultural environments.
- where long flights are involved, jet lag sleep pattern disturbance can be reduced by shifting bedtimes and rising times 2-3 days prior to departure, and by getting outside and active under bright sun as soon as possible after arrival;
- to minimize travel stress, participants may be encouraged to bring a familiar toy, book or other object(s).
- avoid mosquito bites (See **Section 3 General Considerations for Youth Activities**);
- avoid excessive exposure to UVA and UVB solar rays, especially if in warmer climates or on snow or water (See **Section 3 General Considerations for Youth Activities**);
- practise strategies for coping in particularly warm or cold climates, as appropriate;
- if personal medications need to be brought, ensure an adequate supply is brought, and that it is kept in original (e.g., hospital or pharmacy) clearly labeled (i.e., patient's name, contents, dosage) containers. Carry proof of need (e.g., copy of prescription or letter from doctor). See **Medications** in **Sections 4 and 6**).
- if a medication is essential, carry separate containers of it in two different pieces of luggage (at least one of which is carry-on), so that if one piece is delayed, lost or stolen, an alternate supply is available.
- if prescription glasses or contacts are worn, pack an extra pair and for extended trips, bring a copy of the prescription.
- if any group members use a wheelchair or have other special needs, check that destination facilities are accessible. Consider other resources and support needed.

Participant Preparation

Instruct participants, as relevant, to:

- travel to and from the destination with the group unless other formal, documented arrangements have been made with the parent(s)/guardian(s);
- take nothing along that they can't afford to lose and/or to deposit valuables in hotel safes or other secure places;
- carry a credit card(s) and/or traveler's cheques vs. large sums of cash, and practise discreet carriage of any valuables (e.g., in money belts, zip amulets; not flaunting wads of cash or expensive watches/jewelry, etc.) and keep credit card in sight when purchasing goods;
- present themselves as calm, confident and in control;
- stay with their group/buddy, recognizing "strength in numbers", whether in urban or rural environments;
- keep hotel door locked and meet visitors in the lobby; be wary about giving out room number, and personal or itinerary details;



- be cautious about accepting food or drinks from strangers;
- if a female, know how to deal with unwanted attention from strangers (e.g., whistling, suggestive gestures, invasion of personal space) by keeping calm, not retaliating, and going quickly to a safe place (See www.voyage.gc.ca *Her Own Way: Advice for the Woman Traveler*).

Participants' Documents

Participants should carry:

- personal identification, some emergency cash, and a phone card or means to make an emergency phone call;
- the group leader's name; name address and phone number of group's accommodation; and, if relevant, the local contact's name and phone number;
- Medic-Alert bracelet, if appropriate (see **General Considerations for Youth Activities in Section 3**); and
- a means of identifying themselves as a member of the group (e.g., brightly colored cap, scarf, ribbon on daypack or item of clothing in common color scheme) (see **General Considerations for Youth Activities in Section 3**); and
- if not in an area where they speak the language commonly used, a note in this language for use if they get lost, asking to be re-united with the group at the accommodation/meeting point, or taken to the police station.

Air, Rail or Marine Travel

- All group members must be aware of luggage size and weight restrictions for each mode of conveyance (delays could pose huge problems for everyone).
- Ensure all group members are aware of prohibited and restricted items and materials, for carry-on and checked baggage. If unsure about an item, contact Transport Canada for clarification.
- If traveling by bus, plane, boat/ferry or train, try to ensure the group will be accommodated as a whole and not split up.
- Avoid riding on overcrowded conveyances (e.g., buses, ferries).
- Ensure participants are aware of all rules, regulations, boundaries, etc. during travel;
- Ensure all personal luggage, including carry-ons is clearly labeled;
- If flying, ear pain can be troublesome for younger participants. Encourage swallowing or chewing (e.g., gum) to relieve this.
- Motion sickness and related nausea, dizziness and vomiting, can occur during any type of conveyance; from cars to planes, trains and boats. Covering the window beside the individual may help. Taking off extra clothing layers may help, if it is hot. Eating and drinking can help, but avoid excessively sweet, salty, or acidic items (e.g., fruit juice) or carbonated beverages. A cool wet compress may help reduce dizziness.
- If a group member is in a wheelchair or has other special needs, see Canada Transport Agency www.cta-otc.gc.ca for information on accessible transportation.

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Exchange Visits

Domestic or international youth exchanges offer a unique opportunity for young people to become immersed in a new culture and to learn in a supportive environment. The success of an exchange depends on good relations and communications with the partner organization. The Society for Educational Visits and Exchanges in Canada (www.sevec.ca) will handle most of the site and billet investigations and arrangements for exchanges in Quebec. See other considerations related to excursions and/or international travel as relevant.

Leaders should brief their participants ahead of time, sharing as much information as they have about the general social and cultural expectations of the region to be visited, behavioral expectations, etc.

In addition, review the subsection on **Billeting** in **Section 4 Special Considerations**.

International Travel

International travel can be extremely rewarding, but it is important that carefully documented preparation occurs. Hazards involved relate to physical and social environments, personal care, behavior, supervision, activities undertaken and equipment used. Information in earlier sections applies to visits abroad, but some additional factors need to be considered. Consult board and/or school policy regarding international travel.

Planning and Preparation

- The approval process for international travel is typically substantially longer than for trips within Canada, so the leader who wishes to initiate such a trip needs to start early. Consult organization policies and procedures regarding proposal submission deadlines, intermediate submissions and final approvals prior to departure. Consider also that it may take a year or more to get funding in place for a major international excursion.
- Select an appropriate destination(s). Avoid excursions to known:
 - natural disaster areas (e.g., earthquake, flood, hurricane, tornado);
 - areas with serious potential health risks (e.g., Malaria, Mad Cow Disease, Hoof and Mouth Disease);
 - war zones (imminent or existing);
 - regions with political or civil instability (e.g., civil war, terrorism);
 - remote areas that require the use of non-commercial aircraft (e.g., private planes).
- Consult the *Country Travel Report* on the proposed destination, which includes travel information such as crime levels and types, regulations, information on the local Canadian embassy and emergency assistance, health conditions and entry requirements (See Canadian Foreign Affairs Department website).
- Check the *Warnings and Advisories* posted by the Department of International Affairs, which highlights conditions (e.g., civil unrest, terrorism) in countries the department considers unsafe for Canadians.
- Trips abroad may be organized as an independent venture, or as a pre-packaged arrangement from a tour operator. Such packages include travel, accommodation and/or other tourist services (e.g., admissions to tours or attractions). When using a tour

operator, request written evidence of security or bonding to provide for the refund of advance payments and costs of repatriation in the event of any failure to provide the contracted services. Have a written contract detailing roles, responsibilities, costs, cancellation policies, etc.

- Ensure all members of the group have valid passports (valid for six months past return date of trip); contact nearest Passport Office and visas (contact Foreign Government Office in Canada), as appropriate. If a passport is not required to enter a country, ensure other valid photo identification and proof of citizenship is carried.
- Visa rules are complicated and changeable. Presence of a visa is not a guarantee of entry into some countries. Seek assistance for special cases (e.g., a participant who is not a Canadian citizen, a participant who is a ward of the court).
- Ensure that the name on a participant's passport is consistent with what is on their other documents.
- Carry documentation proving the leader's right to accompany children other than their own (e.g., letters from parents/guardians, signed consent form that includes the travel details).
- It is recommended that group members have or secure comprehensive out-of-country travel insurance (covering medical evacuation, hospital treatment, etc.) appropriate for the destination country(ies) and activity(ies) involved.
- Participants engaging on an international travel venture should have their routine immunizations (e.g., diphtheria, whooping cough (pertussis), tetanus, polio, measles, mumps and rubella) up-to-date. Determine what, if any, other vaccinations are required and ensure all members of the group receive these in good time (this may be several weeks to months prior to departure, so check early) and carry their documentation of such, if required.
- See www.Travelhealth.gc.ca for health related hazards, warnings, immunization information, etc.
- Consider the time of year and location in determining whether to suggest group members get a flu shot prior to departure.
- If appropriate given the destination and/or duration of trip, encourage or require participants to secure a physician's medical screening and encourage a preventative dental check-up.
- Have a phone card, foreign currency, contingency fund for emergencies (e.g., emergency medical treatment).
- Conditions in lodgings used (e.g., hotels, motels, hostels) may be quite different than those found in Canada. Inspect for exposed wiring, pest poisons, loose or missing stair or balcony railings and other obvious hazards. If one or more hazards are present, choose an appropriate course of action (e.g., get it attended to by lodging staff immediately, move to other lodging).

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Transportation

- Choose a safe form of transportation in each country. In some countries, vehicles may be allowed (including buses, vans or trucks) that are poorly maintained or overloaded, and/or where drivers have little or no training in safe operation.
- Always wear seatbelts when they are available, and never be afraid to tell a driver to “Slow down”, “Stop”, or “Let me/us out.” Report reckless drivers to the company and if very serious, register a complaint with the Canadian Embassy.
- Avoid night travel in countries that do not have good safety records.
- In general, avoid motorcycle travel. If choosing motorcycle travel, insist that helmets are provided if they have not been brought on the trip.
- If renting a vehicles, insist that they are equipped with seat belts, check the tires for sufficient tread and ask about the latest brake inspection.
- If the driver(s) are part of the group (e.g., leader, supervisor), ensure they are familiar with the rules, regulations and procedures of the destination country (e.g., legal requirements, left-hand drive traffic, carrying capacity and loading requirements). All drivers must be appropriately licensed; check that a Canadian license is recognized or secure an international driving permit.
- If the vehicle is brought from home, ensure proper ownership documentation is carried.
- Road travel, in any country, is a significant hazard, particularly in rural areas and/or in developing countries. Risks may include roads that are poorly constructed and maintained; narrow, winding roads; hairpin curves with no guardrails provided; lack of sufficient lighting or traffic signals or signage; wild or domestic animals on or crossing the road; speeding, aggressive drivers; driver disregard for safety or the law; driving without headlights or tail lights; and/or driving while under the influence of alcohol or drugs.

Preparing Participants

Every participant on an international excursion needs to have a strong sense of ownership for the venture; an awareness that his or her choices can make or break the trip for everyone in the group. Participants should be instructed in areas relevant to their safety, including, if and as appropriate:

- basic awareness and respect for local laws, religion, politics and culture (e.g., rules and regulations of behavior, body language, dress codes, local customs, religious mores, attitudes to gender);
- prepare to experience some culture shock, which can lead to feeling uncomfortable, frustrated, withdrawn, negative or unfocused. Usually, travelers are able to work through this and may even find they experience reverse culture shock upon returning home after a long time abroad.
- language - particularly common phrases;
- food and drink; e.g., sources of safe water and liquids for drinking (e.g., sealed bottled beverages, pasteurized milk and dairy products, boiling water, avoiding ice); washing raw vegetables/fruit; ensuring meats and shellfish are thoroughly cooked and avoiding

reheated or precooked foods, cold meat, salads and salad cream; ensuring dishes are clean;

- avoiding touching animals in general if in a less developed country, to avoid bites and potential diseases. Wash hands well/use hand sanitizer immediately after touching any animals.
- bringing adaptor plugs for electrical equipment brought from home;
- bringing contact lens solution, vitamins and/or other items they may use but that may not be available or prohibitively expensive in the country visited;
- use of phones abroad (e.g., calling cards or money);
- the substantial risk of severe penalties (e.g., jail, even death) if caught with illicit drugs (or even alcohol) in some countries;
- for adolescents, information to help them protect themselves from contracting HIV (e.g., prevalence of the disease, risk behaviours (e.g., unprotected sex, sexually transmitted diseases (STDs), alcohol use, multiple sexual partners), and steps to reduce the risk;
- the hard and fast rules re: never carrying packages or luggage for another person through Customs or across a border, never driving someone else's vehicle through customs or across a border, never hitch-hiking in a foreign land, and never leaving personal property under the watchful eye of a stranger;
- if/as relevant, the limits on the quantities of medications (over-the-counter or prescription) that may be taken out of Canada or brought into them;
- providing accurate, clear and consistent replies to questions on Customs Declarations cards or as posed by Customs' agents; and
- emergency procedures (e.g., what to do and where to go if injured, lost or stranded).

Travel Documentation

Documents to be carried by the group leader, as relevant, include:

- travel tickets, passports and visas and a separate list of the numbers on these documents, or photocopies of them in a sealed, waterproof bag, stored separate from the originals;
- copies of contracts with the tour operator, transportation, accommodation, and other service providers;
- a list of group members and their details;
- health/medical forms and significant medical histories of all participants;
- a doctor's or dentist's note regarding any prescription medications carried;
- parental/guardian consent forms, emergency medical treatment authorizations and emergency contacts at home (e.g., parents/guardians' names, phone numbers and addresses for the home and workplace);
- photos of each group member (in the event someone goes missing; passport photos for international travel in case a passport is lost or stolen and needs to be replaced);
- copies of volunteer consent/acknowledgement of risk forms;
- copies of driver's licenses or international driving permits;

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- details of insurance arrangements and the insurer's phone number;
- accommodation contacts; and
- location(s) of emergency services (e.g., hospitals).

Organization and Home Contact Person Documents

- Both the organization contact (e.g., Project Manager or designate) and the Home Contact Person should have each other's names and numbers and copies of the itinerary and contact numbers/addresses of the group. In addition, the leader should provide each of these two people with a sealed envelope containing copies of the travel documentation items described above.
- See **Home Contact Person** in **Section 4** for guidelines regarding this role.

Participants' Documents

For international travel, participants should also carry on their person:

- their passport or other proof of residency, if they are non-Canadians residing in Canada;
- an appropriate amount of foreign currency and phone card or other means of placing an emergency call;

Emergency Procedures

Planning and preparation to deal with emergencies includes, but is not limited to:

- ensuring all members of the group and Home Contact Person knows the emergency protocols established and any modifications made based on new information;
- familiarity with diseases prevalent in the country(ies), what action to take to avoid infection or in the event that one or more group members become infected;
- knowledge of how to avoid health problems caused by insufficient or contaminated food and water, lack of sleep, or over-exertion;
- having an adult contact with a valid passport on standby at home to come and provide support in the event of an emergency;
- applying an Emergency Plan, coordinating communications with organization and emergency response agencies;
- having a Communications Plan that considers common problems related to group travel abroad and identifies who to call in what circumstances and how to call (cellular phone, phone card, etc.).
- having a system for securing additional funds, if needed. Keep original receipts for any purchases, as well as any bills (e.g., accommodations, medical), car rental agreement;
- ensuring leaders, supervisors and older, more mature participants know the location and phone number of the nearest Canadian Mission, Embassy or Consulate. The Department of Foreign Affairs and International Trade (DFAIT) can be called collect in Ottawa at (613) 996-8885 8885 or if having call placed from Canada 1(800) 267-6788, if urgent assistance is required abroad (e.g., a passport lost or stolen, detention by the police);

- completing a police report immediately if a group member loses his or her passport and/or if valuables are stolen;
- measures to be taken to remove an individual whose behavior threatens the safety of that individual and/or the group, ensure the repatriation arrangements are known by the parents concerned (including their responsibility to cover any and all additional costs related to this action, including those of staff and volunteer chaperones); and
- ensuring a contingency plan is in place to return the group or specific members home early.

After the Trip

After a major trip, consider the following:

- conduct a debriefing of the leadership team and participants to discuss what went well, what could have been better and how. Debrief any incidents or near misses;
- instruct group members that, in the upcoming months, if they develop a fever, rash, difficulty breathing, or any other unusual symptoms, to seek medical aid and to tell the doctor or health-care provider their travel history;
- complete the financial reconciliation (i.e., funds brought in, expenses, deficit or surplus) and determine how any deficit or surplus will be dealt with. A surplus, for example, may go toward future activities of the group or to a charity; and
- complete any requirements related to providing the organization with a summary report. File a copy of all essential documents, as required by the organization. If no incidents occurred where other copies of the documentation may be needed as evidence, collect and destroy the second copy carried on the trip, the copy held by the Program Manager (or delegate) and the copy held by the Home Contact Person.

For unfamiliar terms, see the **Glossary** in the *Safety First! Level 1 Manual*.

See **Additional Resources and References** for other helpful websites and resources related to travel.

Section 8–10

Appendices

- A. Sample First Aid and CPR Courses for Higher Care Activities**
- B. Sample First Aid Kits (Local Through Remote Environments)**
- C. Casualty Report Form**
- D. The SAFETY FIRST PLEASE RULE**
- E. Leader Readiness for Higher Care Activities**



A. Sample First Aid and CPR Courses for Higher Care Activities

A variety of first aid and cardiopulmonary resuscitation courses are available for those who are involved in providing higher care activities. Some involve only first aid or CPR, but some also combine the two elements. Some common first aid and/or CPR providers are noted, but there may be others available (public or private) in your community as well; the list is not exclusive, nor does it endeavour to suggest that a course from another provider is not as good or as valid.

The courses listed here are for leaders and supervisors involved in higher care risk activities (e.g., adventure pursuits, out-of-province travel) and/or environments (e.g., remote, wilderness). It builds on rather than repeats the content from the related appendix in the Level 1 Manual (e.g., all CPR courses are covered and all first aid courses up to Standard First Aid level). Standard level and equivalent courses are repeated here. For those only involved in lower risk, local activities, see the **Level 1 Manual**.

Cardiopulmonary Resuscitation Courses (CPR)

See **Level 1 Manual**

Lifesaving Society

- Bronze Medallion
- Bronze Cross
- National Lifeguard Service

St. John Ambulance

- St. John Ambulance Standard First Aid (with CPR C); 16 hours.
- St. John Ambulance Extended Standard First Aid (with CPR C); 24 hours.
- St. John Ambulance First Aid in the Wilderness (A); 22 hours; Prerequisites: Standard First Aid with CPR (C) or Extended Standard First Aid.
- St. John Ambulance Emergency Medical Responder – EMR; 80 hours; Prerequisites, Extended Standard First Aid or Standard First Aid and CPR (C) within last six months.

Red Cross

- Workplace CPR/AED: Level A: 4 hours, Level B 5 hours, Level C 6 hours, Level HCP (Health Care Provider) 6 hours
- Canadian Red Cross ChildCare First Aid (CPR Level B); 8-18 hours.
- Canadian Red Cross Workplace Standard First Aid (CPR Level A); 14-16 hours.
- Marine Basic First Aid and CPR Level A and AED: 6.5-8 hours

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Canadian Ski Patrol

- Canadian Ski Patrol System First Aid (CPR Level C): 66 hours

Other Providers

- Wilderness Medical Associates – Wilderness First aid (CPR A optional); 16-18 hours.
- Wilderness Medical Associates – Wilderness Advanced First Aid (CPR A); 36 hours.
- Wilderness Medical Associates – Wilderness First Responder (CPR C); 72-80 hours.
- Rescue Dynamics – Wilderness Emergency Care / Advanced First Aid (CPR C); 90 hours; Standard First Aid and CPR (C) within last 6 months.
- Rescue Dynamics – Emergency Mountain First Aid (CPR/AED); 16 hours
- Rescue Dynamics – OWLS Essentials of Outdoor and Wilderness Life Support; 45 hours



B. Sample First Aid Kits (Local Through Remote Environments)

Local (< 20 minutes to get casualty to EMS or from EMS arriving on-site)			Use(s)
Needed	Current	Quantity	Item
		1 pr.	Scissors / EMT shears
		1 pr.	Tweezers
		5	Safety pins – assorted sizes
		1	Resuscitation barrier device with a 1-way valve
		1 bar	Cleansing soap
		5	Antiseptic towelettes
		20	Adhesive bandages (sterile), assorted sizes
		3	Triangular bandages
		1 roll of 75 mm	Crepe tension bandage
		1 roll of 75 mm	Conform gauze bandage
		5 10 cm x 10 cm	Sterile gauze pads (individually packaged)
		2 10 cm x 10 cm	Sterile compress dressings (indiv. packaged)
		2 15 cm x 15 cm	Sterile compress dressings (indiv. packaged)
		1 roll of 125 mm	Adhesive tape
		6	Butterfly or steri-strips
		4	Cotton-tipped swabs
		4 pr.	Vinyl or nitrile gloves (surgical gloves)
		1	Space blanket, blanket, or sleeping bag
		1	Instant cold pack
		1	Waterproof waste bag (e.g., ziplock bag)
		1	Emergency Response Checklist
		1	First aid booklet
		1	List of first aid kit contents
		1	Pencil (soft, waterproof); paper / forms
		3	Incident Report Form
			Semi-remote (> 20 minutes to < 1 hour to/from EMS) Add the following to the above list:
		1	Epi-pen
		6	Wound closure strips
		2 25 x 40 cm	Non-adherent dressings
		1 pkg.	Second skin
		1 12 x 24 cm	Molefoam
		1	SAM Splint or ensolite pad
		3 1-litre	Re-sealable zip-lock bags
		1	Sub-temperature thermometer
		10 tablets	Dextrosol or 1 package Diabetic jell
		3	Casualty Assessment Checklists
			Increase the quantity of supplies noted under local trips; e.g., triangulars, tape, gauze, gauze pads, pressure dressings, sensors, cotton swabs, steri-strips, antiseptic towelettes, space blankets/blankets/sleeping bags, Second Skin. The actual amount needed should be based on the considerations noted in the document. Consider medications, as appropriate.
			Remote (> 1 hour to/from EMS) Add the following:
		2	Oral airways (consider sizes)
		1 20 cc	Bulb syringe with catheter tip
		2	Sterile abdominal pad / field dressing
		1 tube	Double topical ointment (e.g., Polysporin)
		1 tube/vial	Toothache ointment / Oil of Cloves
			Increase the quantity of supplies noted for local and semi-remote trips, especially if trip is of long duration (> 1 week). See notes regarding the addition of medications, as inclusion of at least some is indicated.
			Use(s) Cutting tape, Moleskin or other blister protection, etc. Removing splinters, ticks, etc.; cleaning wounds Fastening tensors, triangular bandages, etc. Protects first aid provider during artificial respiration/CPR Cleaning around wounds, washing first aid provider's hands Cleaning wounds Minor cuts, scrapes Bandaging, splinting Sprains, strains, holding dressings in place, etc. Holding dressings in place, creating pressure bandages Wound dressing Wound dressing Wound dressing Taping dressings or splints, stabilizing joints, etc. Wound closure Removing foreign material from eye Protection of first aid provider from blood/other fluids Keeping immobilized casualty warm Prevents inflammation (use with caution) Storing and disposing of potentially hazardous waste Reference Reference Reference, restocking after use Note taking, recording vital signs, etc. To document incident (submit to Program Manager or designate) Severe allergic reaction (know contra-indications) Close wounds (stronger than butterflys or steri-strips) Open wounds Blisters, abrasions, weeping wounds, burns Blisters (can cut donut around blister to reduce pressure) Immobilizing joints and fractures Sucking chest wounds, stowing disposable items, etc. Monitoring body temperature, including hypothermia Hypoglycemia, insulin reactions in diabetics, hypothermia Recording results of primary/secondary assessments, vitals Increase the quantity of supplies noted under local trips; e.g., triangulars, tape, gauze, gauze pads, pressure dressings, sensors, cotton swabs, steri-strips, antiseptic towelettes, space blankets/blankets/sleeping bags, Second Skin. The actual amount needed should be based on the considerations noted in the document. Consider medications, as appropriate. Airway maintenance of unconscious person Flushing wounds Dressing large wounds Prevention of infections, speeds healing of wounds Toothache pain management Toothache pain management (> 1 week).

C. Casualty Report Form

Name of Casualty	Name of First Aider	
Name of Leader	Date and Time of Incident	
Sponsoring Organization	Phone	
Casualty Age Sex	Health Care #	
Location of Casualty (address or closest landmark):		
Mechanism of Injury/Illness		
Chief Complaint (OPQRST)		
Onset		
Provocation		
Quality		
Region of body/radiation		
Severity		
Time sequence		
Vital Signs		
Date/Time		
Level of Consciousness (alert, verbal, pain, unresponsive)		
Pulse (rate, strength, rhythm)		
Respiratory rate and rhythm		
Skin (colour, temperature, moisture)		
Pupils (size, equality, reactivity to light)		
Temperature		
Signs/Symptoms (casualty exam)		
Allergies		
Medications		
Past Medical History		
Last Oral Intake		
Events (recent, relevant)		
ASSESSMENT Problem List (prioritize)		
PLAN: Emergency care rendered/changes in casualty's condition		
EVACUATION PLAN (timetable, backup, pickup point)		
First Aider Signature	Date	Time

D. The SAFETY FIRST PLEASE RULE

To summarize the key aspects of activity/excursion preparation, risk reduction and emergency procedures, this acronym will be applicable to each activity.

SAFETY	-	elements related to competency of the staff and qualification of the activity/excursion
FIRST	-	location and equipment related considerations
PLEASE	-	instruction considerations
RULE	-	supervision considerations

The specific initials stand for the following:

S	Supervisor readiness	Leadership/supervisory team has the relevant knowledge, skill, fitness and experience needed.
A	Administrative review	Activity/excursion proposal reviewed and approved by appropriate board designate.
F	First-aid capacity	The supervisory team has adequate first aid training, equipment and supplies for the activity and environment.
E	Ends in mind	The activity/excursion has a valid, articulated recreational, educational and/or social purpose and objectives.
T	Transportation	Appropriate vehicles and drivers are secured and emergency procedures/equipment ready.
Y	Youths' parents' consent	Parents/guardians are aware of trip plan and risks, and provide informed acknowledgement of risk and consent.
F	Familiarity with area/site	The leader is confident, through pre-visiting and/or securing relevant information, that the area/site is appropriate.
I	Installation/gear	Equipment/clothing lists provided and gear inspected for adequacy, considering amount, fit, and functional state.
R	Repair kit	Kit accessible with appropriate equipment, tools, supplies and know-how to repair foreseeable equipment break-downs.
S	Survival kit	Kit accessible with appropriate equipment, supplies and know-how to ensure that group survives foreseeable mishap.
T	Tags secured	Land use permits, camping permits, and other permits and licenses obtained and carried by leadership team.
P	Precautions	Safety precautions, including appropriate procedures, and rules and warnings are taught and enforced.
L	Liquids and food	Participants are supported to act to avoid dehydration and fatigue.
E	Emergency procedures	Participants are aware of the emergency protocols & communications systems in place; everyone carries a noisemaker.
A	Activity instruction	Participants are taught relevant content knowledge, technical skills and attitudes necessary for safe participation.
S	Sun and insect protection	Participants are made aware of the need for and supported in ensuring protection from sun and insects.
E	Expectations of participants	Parents/guardians and participants know the rules of participant conduct and the consequences of inappropriate behavior.
R	Ratio	There is an appropriate number of competent supervisors present based on risk and supervisory needs assessment.
U	Unified leadership	Leaders and assistants are clear regarding their roles and responsibilities; e.g., supervision, instruction, discipline.
L	Level of Supervision	Constant visual, on-site or in-the-area, depending upon the real risk inherent in the group, activity and environment.
E	Emergency Plan	Emergency protocols are known; e.g., internal and external communications systems, emergency response plan

Section A-6

E. Assessing Leader Readiness for Higher Care Activities

One of the most important determinants of the safety and success of a given off-site activity involving higher care activities (e.g., outdoor pursuits, aquatics, semi-remote to remote environment travel); are the competencies or capabilities of the Activity Leader. Readiness is the interactive combination of relevant knowledge, skill, health and fitness, attitude, behavior, confidence, experience and judgement. Following is a tool for a leader to self-check his or her capacity to instruct/lead a given activity as part of the approval process for the proposed trip.

Application of the tool does not require that the leader necessarily document their responses for every trip, nor that every question be utilized. This is simply a tool to stimulate relevant reflection and/or discussion and assist leaders and administrators in ensuring they are comfortable and confident that the leader can safely run a specific proposed youth-serving organization trip. The objective for using this tool must be 'Getting to Yes'; working together to identify any gap(s) in the leader's knowledge, skills, experience or health/fitness relevant to leading the off-site experience and then identifying effective and efficient ways to address these gaps.

The tool can help the new leader learn to self-check and develop commitment to the culture of shared responsibility for safety and security in the organization. It may help the new leader, or one stepping back into running higher care outings after a period away to identify leadership development opportunities to enhance personal capacity to deliver these types of outings.

Assessing Leader Readiness for Higher Care Activities

Name of Leader _____

Proposed Program/Activity _____

1. Have you taken any relevant formal training in outdoor recreation, outdoor education, outdoor pursuits or related disciplines? Include certification courses, academic coursework, non-academic courses, other courses or workshops, but not first aid/CPR. Yes No

If yes, complete the table below with respect to the most relevant course(s). Write in your responses to the first five rows, and place checkmarks for Yes responses over the remaining items per course. Be prepared to share examples for these items.

Course Particulars	Course 1	Course 2	Course 3
Name of course and level, if appropriate			
Institution/organization offering the course			
Year the course was taken (approximate)			
If led to certification, is the ticket current now?			
Approximate course hours (face-to-face)			
Were your technical skills developed?			
Were your instruction skills developed?			
Were your trip leadership skills developed?			
Did you learn relevant safety procedures?			
Did you learn relevant emergency procedures?			
Did you instruct/lead peers over the course?			
Did you instruct/lead children over the course?			

2. What, if any, first aid certification do you hold? _____
Is this certification considered current by the certifying body? Yes No

3. What, if any, CPR certification do you hold? _____
Is this certification considered current by the certifying body? Yes No

4. Do you have relevant personal recreational and/or sport experience in the activity? Yes No

If yes, please answer the following:

Number of years of participation in the activity _____ years

Days of involvement in the activity over the last three years _____ days.

Involvement as part of an organized group (e.g., club, team) Yes No

Have you had a significant mentor in the activity/environment? Yes No

5. Have you instructed/led this program/activity formally in the past? Yes No

If yes, answer the following, in relation to the proposed program/activity:

Particulars of Instruction/Leadership Experience	Yes	No
Have you taught/led this same program/activity before with similar participants?		
Have you taught/led this or other activities in a similar area/site?		
Have you instructed/led participants in relevant technical skills?		
Have you instructed/led participants in relevant safety procedures?		
Other relevant experience. Specify:		

6. If this is a new activity for you, have any other youth-serving organizations of which you are aware conducted this activity (note which youth-serving organization, grade, activity and site/area)?

7. When, if at all, were you last at/on the proposed site/route? Date: _____
Describe nature/level of pre-visit _____

8. For any gaps in personal or professional relevant training, knowledge, skills, health and fitness, and/or experience, what is your plan for addressing this area(s)? _____

Section A-8

General Assessment Based on Responses Above

Readiness Element	Perceived Contribution to Overall Readiness			
	Low	Mod.	High	Comments
Formal Training/Courses				
First Aid/CPR Certification				
Recreational/Sport Experience				
Instruction/Leadership Experience				
Familiarity With Site/Area/Route				
Interpersonal "Soft" Skills				
Addressing of Gaps				

Overall Readiness for the Proposed Program/Activity

(circle one) Low Moderate High

Comments (e.g., general, requirements for program modification and/or resourcing):



Section A-10

Safety First! Guidelines for
Higher Care Youth Programs,
Level 2 Manual



Sponsors



National Search & Rescue Secretariat



Emergency Management Alberta

Community Supporters



LifeSaving Society



Alberta TrailNet Society



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