

SECTION 6 - SPORT SAFETY



Coaching Tip: Risk management is really the exercise of good common sense, but in a planned and structured manner in accordance with a formal plan and recording system.



6.1 Sport Safety Through Risk Management

By its very nature, physical activity can present some risk of injury. One of the key responsibilities of the coach is to manage the potential risks that present themselves during practice or competition.

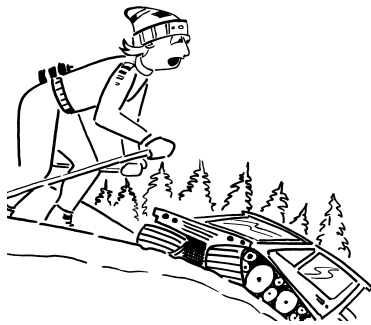
The main risk factors can be categorized as follows:



Environmental Risks

Factors related to the weather and/or its effects on the site or location where the sport takes place.

Examples: freezing rain; icy conditions on the trails; very cold weather/windchill; travelling across thin ice; snow storms.



Equipment and Facilities Risks

Factors related to the quality and operating conditions of the equipment and the facilities.

Examples: the snow cat is on the ski trail during the practice session; a tree falls across the ski trail; a skier uses ski poles/boots that are much too large; there is a fence at bottom of the hill used for practice.



Human Risks

Factors related to the participants and the people associated with them, such as parents, coaches, officials and event organizers. Human risks may also be related to a participant's individual characteristics (e.g. height, weight, level of physical preparation, ability) or behavior (e.g. carelessness, panic, aggression).

Human factors related to coaches include their training and experience and their supervision of the participants, as well as the decisions they make about situations in which they place the participants.

Examples: a beginner skier is asked to ski down a steep slope; a skier leaves a deep hole on a hill after a fall; one skier gets left behind while on a group ski tour; skiers group to talk at the bottom of a blind downhill corner on the ski trail; skiers ski the wrong direction on a one-way ski trail.



6.2 Strategies for Managing Risk

Information to Gather	Actions to Take
<ul style="list-style-type: none"> • Risks of the activity • Participants' medical information • Participants' contact information in case of emergency • Facility safety checklist • Past injury reports 	<ul style="list-style-type: none"> • Planning • Designing an Emergency Action Plan • Inspecting equipment and facilities • Informing participants and parents • Supervising activities

Information to Gather

- Phone numbers and addresses of the participants, their parents, the ambulance service, the police force, the fire department and the public safety service (see Emergency Information Chart - section 7.7).
- Medical conditions of each participant (e.g. illnesses, allergies, disabilities, injuries), whom to contact in an emergency situation and procedures to follow if an emergency occurs (e.g. administer a specific medication).

Keep this information in a waterproof binder that you can carry with you to the training or competition site.

Find out if 911 services are accessible from your facility or if there is medical support on site.

Planning

- Ensure that the activities are appropriate for the age, fitness and ability level of the participants.
- Ensure that the practice starts with an age-appropriate warm-up, and that the activities include a reasonable progression and challenge for the participants.
- Adjust activities for participants who cannot perform them as planned for the larger group.

Designing an Emergency Action Plan

- Guidelines for designing an Emergency Action Plan (EAP) appear in this document (see section 6.7).

Inspecting Equipment and Facilities

- Ensure that you are fully aware of the specific safety standards related to the equipment used in your sport.



- Take an inventory of collective and individual equipment.
- Take an inventory of available first aid equipment. Carry a first aid kit at all times.
- Assess the safety of the facility itself (e.g. walls, playing area, lighting) by completing a facility safety checklist. Facility Safety Checklist (see section 7.4).
- Identify environmental, equipment, facility and human risk factors.
- Ensure that the participants wear appropriate equipment and that it is properly adjusted and in good condition.

Informing Participants and Parents

- Inform the parents and the participants of the risks inherent to the sport.
- Properly explain the safety procedures and instructions related to all activities, and check that the participants understand them.
- When giving explanations for an activity during a practice or during competition, highlight potential risks.
- Examples: If participants are required to cross paths, ask them to keep their heads up and to be alert to where others are as they are moving around; if it has just rained and your team is practising on wet grass, remind your participants that the field is slippery.

Supervising Activities

- Ensure that the number of participants involved is not so high as to compromise adequate supervision and safety.
- Keep in mind that participants need to be constantly supervised.
- Look for signs of fatigue and aggression in participants and, if necessary, stop the activity.
- Stop the activity/practice if you have to leave the room or site for any reason, or delegate responsibility for the group to a competent person.

Preventing Sport-Related Injuries: What To Do and When To Do It

Before the Season
<ul style="list-style-type: none"> • Have each participant complete a medical profile • Inform parents of possible risks • Ensure facilities and equipment meet established safety requirements • Create and fill in a Facility Safety Checklist • Review last season's injuries and/or common injuries in your sport



During the Season**Before a practice or competition**

- Inspect equipment and facilities
- Meet with the officials
- Prepare an Emergency Action Plan
- Plan specific safety measures for the practice/competition

During a practice or competition

- Inform participants of specific safety measures relating to activities, facilities and equipment
- Ensure there is proper supervision
- Evaluate participants
- Ensure that fair play principles are followed

After a practice or competition

- Store equipment safely
- Fill in an Accident Report Form if necessary

After the Season

- Keep an accident/injury report log



6.3 Cold as a Risk Factor

The Challenge of Exercising in the Cold

- The colder the environment, the faster a participant's body temperature will decrease.
- During exercise in a cold environment, the skin can become wet as a result of sweating or exposure to rain or snow. A wet skin surface cools the body faster than a dry skin surface.
- The temperature may drop considerably once the sun has set, which can quickly increase the level of risk associated with exercising in a cold environment.
- The wind magnifies the perception of cold, and increases the rate at which the body loses heat. This effect can be further amplified if the skin is wet.
- In cold weather, high humidity makes the temperature feel colder than the air temperature indicates it is.
- It is generally easier to tolerate cold when the air is dry although cold, dry air makes it difficult for some asthmatics to breathe.
- Skin can freeze when exposed to very cold temperatures, and when this happens circulation slows. Tissue can be damaged if frostbite is prolonged and extensive. Extremities (e.g. toes, fingers, nose, ears) are particularly at risk in cold temperatures, because the body shunts blood flow to central organs and tissues to maintain the body's core temperature.
- In severe cold, brain function can slow down, and so risk of further injury increases with prolonged exposure.
- Children get cold much faster than adults, and their skin is more prone to freeze. People with less body fat usually have less tolerance for cold than those with more body fat.
- Muscles and other soft tissues that are cold are more susceptible to injuries such as pulls and tears, especially if movements are sudden and intense.
- In very dry cold environments, water vapour lost through breathing and the evaporation of sweat from exposed surfaces may lead to dehydration.
- It can be a challenge to wear appropriate clothing for exercising in the cold. On the one hand clothes must protect the skier against the cold; on the other hand they must not impair the body's ability to get rid of the heat produced during exercise. Heavy clothing can be cumbersome and interfere with movement, and it can also increase air resistance in some sports where speed is critical. At the same time, the thin clothing used in many sports frequently offers little protection from the cold and the wind. Refer to "Clothing for Cross-Country Skiing Activities" and "Lesson Plan - Dressing Appropriately for Skiing" (sections 3.1 and 3.2) for more information.
- The type of fabric worn can either wick water from the body surface (i.e. synthetics such as polypropylene or Gore-Tex®) which results in less risk of heat loss, or trap it there (i.e. cotton or nylon) which results in greater risk of heat loss.



Steps to Avoid Cold Injuries

When exercising in the cold:

- ❑ Ensure participants wear sufficient clothing for the conditions, and layer clothing as follows:
 - ✓ Layer closest to skin: polypropylene, close fitting (wicking effect).
 - ✓ Second layer: fleece or wool, slight room between first layer and second layer for “trapped air” effect.
 - ✓ Third layer: wind-breaking, water repellent, breathable layer.
- ❑ When it is very cold, ensure exposed surfaces are kept to a minimum.
- ❑ Once the body has warmed up, and if the temperature is not too cold, consider removal of the second layer of clothes during exercise to avoid excessive sweating. Have participants add a layer or use blankets to keep warm during breaks or pauses.
- ❑ Apply anti-perspirant to feet before exercising to lessen sweating of the feet (which is usually followed by cooling of the feet). Doing the same on the palm of the hands may reduce the feeling of cold for people who tend to sweat a lot in their gloves or mitts.
- ❑ Ensure participants hydrate when they exercise in the cold.
- ❑ Bring children inside when they say they are cold. It is not worth the risk to prolong exercise and have them suffer from frostbite. Once a person suffers serious frostbite, the risk of subsequent frostbites to the same area may be increased.
- ❑ Never send skiers out into the cold alone or without means of communicating with you and/or an emergency centre. Avoid prolonged activities in which participants are in isolated areas and run the risk of becoming exhausted.
- ❑ When the weather is very cold, and your group needs to train on snow, hold your practices between 11 a.m. and 2 p.m. as these tend to be the warmest hours of the day. Be aware that temperature drops quickly when the sun sets.
- ❑ Educate the skiers and their parents to consider the combined effect of cold and wind when making decisions about how to dress for an outdoor session, rather than simply looking at the thermometer. Do the same when you make coaching decisions about the choice and the scheduling of activities.
- ❑ If possible, choose areas that are protected from the wind and avoid activities in open areas.
- ❑ Ensure protective eyewear is worn to prevent snow reflection from damaging eyes, and to protect them from the cold and the wind.
- ❑ Have the skiers or their parents bring a change of clothing, especially socks and underwear. Try to find a warm and protected spot to change. It is especially important to change after exercising, rather than to stay in damp clothing for the drive home.
- ❑ Inform skiers and parents that a hat should be worn at all times; over 30% of body heat may be lost through the head. Ensure ears are covered to avoid frostbite.
- ❑ Allow additional time to warm up for a training session or a competition. It takes longer to get the body warmed up and ready for a sport activity in cold weather than it does in warm weather.





Wind Chill Factor

Wind makes cold temperatures feel colder. The “wind chill factor” is an index that combines air temperature and wind velocity, and measures the rate at which living creatures lose body heat to the environment. It is not a temperature in the strict sense, but a temperature-like number that quantifies the sensation of cold. It was created to help reduce the risk of frostbite and other cold-related injuries. The wind chill factor should be consulted prior to exercising in the cold, as it provides more useful information regarding the best way to dress than temperature alone.

The table below shows the equivalent temperature (C) felt by the human body as a result of the combined effects of ambient temperature and wind velocity.

Wind Chill Calculation Chart

T air = Air temperature in °C and V10 = Observed wind speed at 10m elevation, in km/h.

T air	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
V ₁₀												
5	4	-2	-7	-13	-19	-24	-30	-36	-41	-47	-53	-58
10	3	-3	-9	-15	-21	-27	-33	-39	-45	-51	-57	-63
15	2	-4	-11	-17	-23	-29	-35	-41	-48	-54	-60	-66
20	1	-5	-12	-18	-24	-30	-37	-43	-49	-56	-62	-68
25	1	-6	-12	-19	-25	-32	-38	-44	-51	-57	-64	-70
30	0	-6	-13	-20	-26	-33	-39	-46	-52	-59	-65	-72
35	0	-7	-14	-20	-27	-33	-40	-47	-53	-60	-66	-73
40	-1	-7	-14	-21	-27	-34	-41	-48	-54	-61	-68	-74
45	-1	-8	-15	-21	-28	-35	-42	-48	-55	-62	-69	-75
50	-1	-8	-15	-22	-29	-35	-42	-49	-56	-63	-69	-76
55	-2	-8	-15	-22	-29	-36	-43	-50	-57	-63	-70	-77
60	-2	-9	-16	-23	-30	-36	-43	-50	-57	-64	-71	-78
65	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79
70	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-80
75	-3	-10	-17	-24	-31	-38	-45	-52	-59	-66	-73	-80
80	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81

FROSTBITE GUIDE

Low risk of frostbite for most people

Increasing risk of frostbite for most people in ten to 30 minutes of exposure

High risk for most people in five to ten minutes of exposure

High risk for most people in two to five minutes of exposure

High risk for most people in two minutes of exposure or less



Wind Chill - Minutes to Frostbite

The following are approximate values:

Temperature (°C)	-15	-20	-25	-30	-35	-40	-45	-50
Wind (km/h)								
10	•	•	22	15	10	8	7	2
20	•	30	14	10	5	4	3	2
30	•	18	11	8	5	2	2	1
40	42	14	9	5	5	2	2	1
50	27	12	8	5	2	2	2	1
60	22	10	7	5	2	2	2	1
70	18	9	5	4	2	2	2	1
80	16	8	5	4	2	2	2	1

• = Frostbite unlikely

The wind speed, in km/h, is at the standard anemometer height of ten metres (as reported in weather observations).

Frostbite possible in two minutes or less
Frostbite possible in three to five minutes
Frostbite possible in six to ten minutes



6.4 Trail Safety

Section 6.1, *Sport Safety Through Risk Management*, reviews possible safety concerns that a coach should keep in mind before and during an activity session. Where possible the trails the group will ski on should be pre-skied to ensure there are no dangerous situations present. For example icy conditions significantly change the difficulty of a trail, and “blind corners” should be approached with care. Also remember to ensure that no trail grooming machinery will be present on the trails you will be using.

- Know which trails you are allowed to ski on, and never ski outside the designated area.
- If you plan to ski in unfamiliar areas, carry a map and stay on recognized trails. Advise others of intended routes and plans.
- Leave a safe trail: fill in holes that you make; remove obstructions; mark hazards on the trail; and advise authorities of problems.
- Avoid skiing in darkness without a head lamp.

The following **“My Trail Etiquette Promise”** is a useful 12-point summary on trail etiquette to present to your skiers.

- 1) If I practice good trail etiquette it will make skiing more fun for everyone!
- 2) When I overtake slower skiers I can call out “track” or I can move to the left and go around them.
- 3) When faster skiers come up behind me I will move to the right and let them pass.
- 4) If I meet another skier head on I will pass to the right.
- 5) If a trail is too narrow for two skiers to pass, I will move to the side and wait until the other skier passes.
- 6) I will remember that skiers coming down a hill have the right of way.
- 7) If I need to stop, or if I fall, I will move off the trail to allow clear passage for other skiers.
- 8) I will move off the trail if I want to visit with my ski-friends.
- 9) I will not take my pets on a ski trail unless the trail has been designated for use by pets (i.e. K-9 Trail).
- 10) I will not litter and I will pack out what I packed in.
- 11) I will respect the custom and say a friendly “hello” when passing other skiers.
- 12) I will obey the trail signs and ski in designated areas only.



6.5 Winter Safety

The following sections in this Reference Material, “Cold as a Risk Factor”, “Hypothermia”, and “Clothing for Cross Country Skiing Activities” (sections 6.3, 6.6 and 3.1), highlight many of the important environment related risk factors that you should keep in mind during your coaching activities. The following summary of tips should be reviewed with your skiers during one of your sessions.

- Never ski alone.
- Dress appropriately for ski sessions, so as to stay dry and warm. Be prepared for bad weather or changing conditions.
- Be prepared for accidents, emergencies or damaged equipment. Bring a backpack on longer trips, with first aid kit, space blanket, drinks and equipment repair materials.
- Learn what to do if you become lost.
- Find out what hypothermia and dehydration are, the signs and symptoms to watch out for, and what you should do if a problem occurs.
- Re-evaluate your plans if you or a group member starts to fatigue.
- Do not ski out of control.
- Ski terrain and distances suited to the fitness levels and abilities of your group members. Occasionally evaluate everyone’s condition.
- Be aware of the dangers of crossing bodies of water in winter. Proceed one person at a time and check the thickness of the ice with your poles.
- Do not ski in avalanche areas without proper training and equipment.

Frostbite

The chances of frostbite and hypothermia are forever present and skiers should be aware of that fact and act accordingly.

- The body’s extremities (fingers, toes and ears) are common places for frostbite.
- As your body gets cold it shuts off the blood supply to the extremities and they freeze.
- Cold temperature combined with constrictive clothing or boots greatly contributes to frostbite.
- Parts exposed to wind and wet readily become frostbitten.
- Symptoms of frostbite are white and waxy skin, with feeling lost in the affected area.
- Frostbitten parts (white) should be warmed up quickly by cupping with the hands or bathing in warm water.



- Do not rub the frostbitten area, especially with snow.
- You may not notice frostbite on yourself, so watch out for each other on cold days.
- Watch the other skiers in your group for signs of frostbite.

Coaching Tip: The essence of safety is knowing what to do to avoid trouble and how to handle it should it occur.



6.6 Hypothermia

Cold! The thought raises markedly different images in different athlete's minds. For some it prompts an avoidance reaction that has them gravitating towards the fireplace or migrating south towards sunnier climes. For others, it represents a challenge that is an integral part of their chosen sport. Winter weather and cold temperatures do pose one very real danger for everyone involved in activities outdoors: hypothermia!

Hypothermia, however, is not restricted to one season to the exclusion of all others. Sub-zero temperatures are not the only contributing factor for the onset of the condition. Any situation that results in the body expending more heat than it creates for a prolonged period of time increases the risk of hypothermia. For athletes who are naturally low in body fat and are involved in outdoor sports with high energy and fluid expenditures, the risk factors are even greater.

Definition

The normal body temperature is around 37° C. Hypothermia occurs when body temperature falls below 35° C and the body's heat loss exceeds its heat production. At this temperature the body no longer generates enough heat to maintain body functions. The heat loss can happen in four different ways: by radiation, evaporation, conduction, and/or convection. Of these, radiation is the main source (60%) of heat loss from the body. Basically, if the environmental temperature is cooler than that of the body, heat travels outward.

Basic Physiology

An area in the brain called the hypothalamus acts as the body's thermostat. It is the central controller of heat balance in the body and triggers an increase in the rate of heat production when the body temperature falls. It is the hypothalamus that makes us shiver when we are cold. Shivering, an involuntary muscle contraction, is the main mechanism for producing heat by increasing our metabolic rate. This can increase the body's heat production by up to five times. The hypothalamus is also responsible for decreasing the blood supply to peripheral areas of the body in order to maintain core temperature and increase hormone production to "up" the metabolic rate. It is when these survival mechanisms fail, and the body is unable to maintain its core temperature, that hypothermia develops. The signs and symptoms are progressive according to the amount of heat loss from the body. An individual's condition deteriorates as the body temperature drops. (See Stages of Hypothermia Table)

A Danger for All Seasons

Although hypothermia is usually associated with harsh winter conditions, it would be wrong to assume that this is the only time of year that someone involved in outdoor activities is at risk. Walkers and hikers who are ill-prepared for the vagaries of weather that can occur in the mountains are particularly susceptible. Wet clothing and the chilling effect of strong winds promote increased body heat loss. Swimmers, divers, triathletes or anyone taking part in aquatic sports have to be aware that water has a much higher thermal conductivity than air and, accordingly, heat is lost from the body more rapidly during cold water immersion than during exposure to air of the same temperature. In winter, cross-country skiers are more at risk than



their downhill counterparts. This is because exhaustion and dehydration are both strong influencing components for the onset of the early stages of hypothermia. *It should also be noted that the whole process from mild exposure to severe hypothermia may take only a few hours or less.*

Risk Factors

A variety of other conditions can also do their part in contributing to the increased chance of succumbing to hypothermia. Drug or alcohol use, hunger, anemia, impaired circulation are all flags for danger when allied to some of the other factors already outlined. Certain medical conditions such as diabetes mellitus and thyroid disorders which adversely affect the body's ability to regulate its own temperature should also be taken into consideration. *Moreover, children and the elderly are more at risk as they are less able to retain body heat in cold conditions.*

Treating Hypothermia

The longer the body core loses heat, the more difficult it is to re-warm. It is therefore imperative to treat hypothermia at the earliest possible stage. The first step of a "cure" is to get the victim out of the cold, wind and rain (or water) and into shelter. If the person is at the shivering stage but not exhibiting other more serious symptoms, get him or her into dry clothing and give them a hot, non-alcoholic drink with some high energy food. It is important to remember that body cooling may increase when the hypothermia victim stops exercising because the extra heat generated by activity then ceases. Someone who was only shivering mildly may begin to show more serious signs upon entering a warm environment.

A person who has slipped further into hypothermia syndrome than the stage of moderate shivering needs more help. Putting the victim into a sleeping bag with another person is a very effective method of re-warming. Skin to skin contact especially in the neck and chest is most beneficial. If available, warm baths are also an effective way to re-warm the moderately hypothermic person. However, the water should be between 30-35° C and the arms and legs should be kept out of the water (it is the core temperature that needs to be raised, not the extremities). Gradually raise the water temperature to 42-44° C over a period of five to ten minutes. For severe victims whose temperature has dropped below 30° C, hot bath re-warming should not be undertaken without medical supervision.

Severe Cases

Make no mistake, hypothermia can be fatal. The adage of mountain rescue teams when dealing with hypothermia cases is that "you are not dead till you are warm and dead". This is because severe hypothermia can mimic death and before presuming someone is deceased, re-warming must be carried out until the core temperature reaches at least 35° C. In addition to this, extremely careful handling of the victim is essential to avoid causing erratic heart beats which could lead to a heart attack.

Resuscitation on-site would include the ABCs (airway, breathing and circulation) but no cardiac compression should be applied until a diagnosis of cardiac arrest is certain. As quickly as possible, the victim should be taken to a warm environment and any wet clothing removed. Warm, dry clothes should then put on. The next step would then be to transport the victim to a hospital



for comprehensive assessment and treatment. Expert medical supervision is needed for severe cases of hypothermia as the victims usually require both internal and external re-warming. In many instances, this involves putting the person in a bath where the temperature is 40° C. Core temperature can also be increased with the inhalation of heated, humidified oxygen and the administering of warm IV fluids. At this time, the administration of drugs is usually avoided, and due to slowed gastric emptying and absorption in the stomach, no medication is given by mouth. *Exercise is not used as a method of re-warming due to the increased risk of heart failure related to the release of chemicals from blood retained in the extremities of the body.*

Prevention

The best defense against hypothermia is common sense. All outdoor activities should be planned with safety and hypothermia in mind. Key points to bear in mind are:

- Taking proper clothing for the worst conditions you might encounter is one of the best precautions.
- Wool is one of the best materials for all weather warmth.
- Include a hat in your back-pack. Over 50% of a person's heat loss comes from the head and neck area.
- Staying dry and avoiding any type of exposure are the key elements in staying warm. Wet clothes lose most of their insulating value.
- Pack high carbohydrate snacks to keep energy levels up if you are forced to take shelter in poor weather conditions.
- There is safety in numbers. Don't venture out on the trails or the mountain alone.

What Not To Do

Do not massage the limbs of a hypothermic person. This will only draw heat/blood flow away from the core where it is needed.

- Never give an alcoholic drink. This will actually inhibit re-warming.
- Never give a semi-conscious or unconscious person anything to eat or drink due to the possibility of choking.
- Don't treat any hypothermia case lightly.***

Summary

Familiarity with the signs of hypothermia will allow those involved in outdoor sports or recreation to use their own good judgment in situations where hypothermia is a danger. It is important to remember that while some people have miraculously survived under extremely hostile conditions, others have died from "exposure" under mild ones.



Stages of Hypothermia		
Stage	Core Temp. (°C)	Characteristics
NORMAL:	37.5	
MILD:	38	Increased metabolic rate
	36	Temperature at which hypothermia begins by definition. Shiver to create heat.
	34	Violent shiver, mental changes, amnesia, poor judgement, ataxia, apathy
MODERATE:	32	Stupor, decreased gut mobility
	31	Shivering stops.
	30	Rigors, decreased deep tendon reflexes, dilated pupils, weak pulse, low cardiac output, increased risk of dysrhythmias
	28	Decreased coordination with muscle control, staggered gait, increased risk of ventricular fibrillation, increased blood viscosity, decreased inter vascular volume.
	27	Loss of deep tendon reflexes and voluntary motion.
SEVERE:	26	Acid base change, no pain response, decreased cerebral flow, decreased cardiac output.
	25	Increased risk of pulmonary edema. Increased blood pressure.
	22	Maximum risk of ventricular fibrillation.
	19	Flat ECG.
	18	Asystole.



6.7 Emergency Action Plan (EAP)

An Emergency Action Plan (EAP) is a plan designed by coaches to assist them in responding to emergency situations. The idea behind having such a plan prepared in advance is that it will help you respond in a responsible and clear-headed way if an emergency occurs.

An EAP should be prepared for the facility or site where you normally hold activity/practice session and for any facility or site where you regularly host competitions. For away competitions, ask the host team or host facility for a copy of their EAP.

An EAP can be simple or elaborate and should cover the following eight items:

1. Designate in advance who is in charge in the event of an emergency (this may very well be you).
2. Have a cell phone with you and make sure the battery is fully charged. If this is not possible, find out exactly where a telephone that you can use is located. Have spare change in the event you need to use a pay phone.
3. Have emergency telephone numbers with you (facility manager, fire, police, ambulance) as well as contact numbers (parents/guardians, next of kin, family doctor) for the participants.
4. Have on hand a medical profile for each participant, so that this information can be provided to emergency medical personnel. Include in this profile a signed consent from the parent/guardian to authorize medical treatment in an emergency.
5. Prepare directions to provide Emergency Medical Services (EMS) to enable them to reach the site as rapidly as possible. You may want to include information such as the closest major intersection, one way streets, or major landmarks.
6. Have a first aid kit accessible and properly stocked at all times, as well as a supply of blankets (all coaches are strongly encouraged to pursue first aid training).
7. The ski area should have a snowmobile and appropriate medical transport toboggan available at the trail head to transport injured skiers to an ambulance. The ski area may also have a portable heater available in case the injured person needs to be left on the snow until the Emergency Personnel arrive.
8. Designate in advance a “call person” (the person who makes contact with medical authorities and otherwise assists the person in charge). Be sure that your call person can give emergency vehicles precise instructions to reach the ski area, and the snowmobile operator precise directions to where the injured skier is located on the trail system.

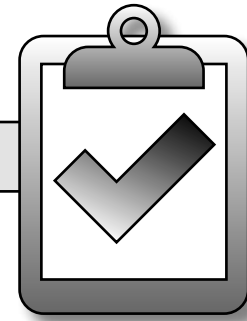
When an injury occurs, an EAP should be activated immediately if the injured person:

- is not breathing;
- does not have a pulse;
- is bleeding profusely;
- has impaired consciousness;



- has injured the back, neck or head; or
- has a visible major trauma to a limb.

6.7.1 Emergency Action Plan Checklist



Emergency Action Plan Checklist	
Access to telephones	<ul style="list-style-type: none"> — Cell phone, battery well charged — Training venues — Home venues — Away venues — List of emergency phone numbers (home competitions) — List of emergency numbers (away competitions) — Change available to make phone calls from a pay phone
Directions to access the site	<ul style="list-style-type: none"> — Accurate directions to the site (practice) — Accurate directions to the site (home competitions) — Accurate directions to the site (away competitions)
Participant information	<ul style="list-style-type: none"> — Personal profile forms — Emergency contacts — Medical profiles
Personnel information	<ul style="list-style-type: none"> — The person in charge is identified — The call person is identified — Assistants (charge and call persons) are identified
<ul style="list-style-type: none"> • <i>The medical profile of each participant should be up to date and located in the first aid kit.</i> • <i>A first aid kit must be accessible at all times, and must be checked regularly.</i> 	



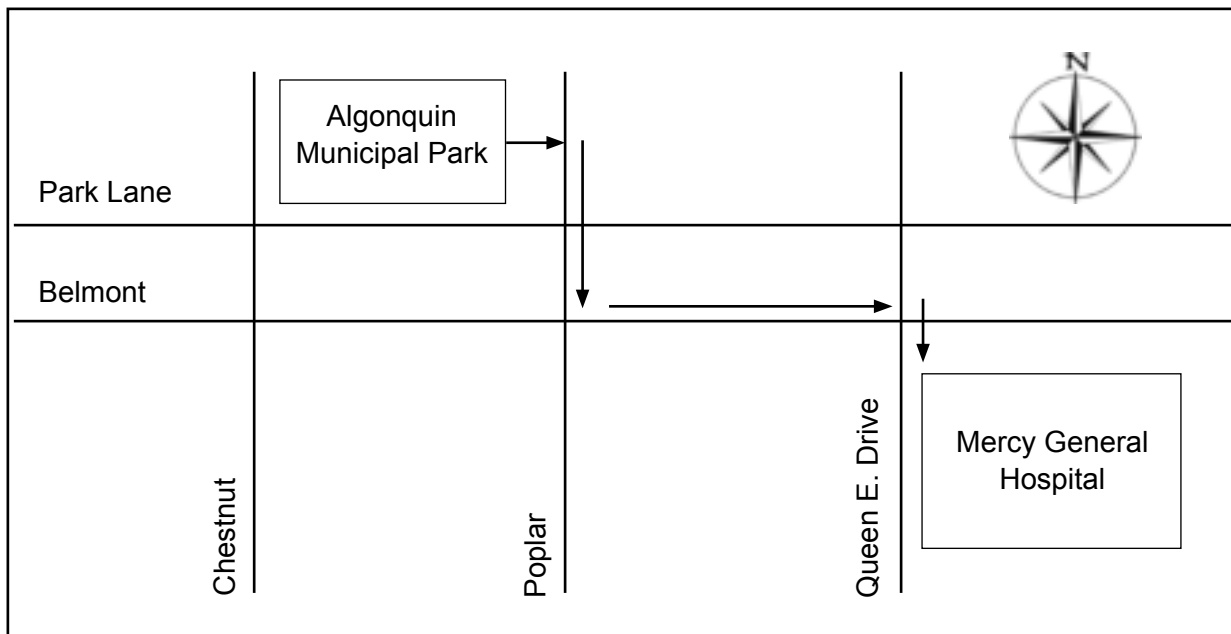
6.7.2 Sample Emergency Action Plan

Contact Information

Attach the medical profile for each participant and for all members of the coaching staff, as well as sufficient change to make several phone calls if necessary. The EAP should be printed two-sided, on a single sheet of paper.

Emergency phone numbers:	9-1-1 for all emergencies
Cell phone number of coach:	(xxx) xxx-xxxx
Cell phone number of assistant coach:	(xxx) xxx-xxxx
Phone number of home facility:	(xxx) xxx-xxxx
Address of home facility:	Algonquin Municipal Park 123 Park Lane, between Chestnut St. and Poplar St. City, Province/Territory XXX XXX
Address of nearest hospital:	Mercy General Hospital 1234 Queen Elizabeth Drive City, Province/Territory XXX XXX
In-Charge person (1st option):	Suzie Chalmers (coach)
In-Charge person (2nd option):	Joey Lemieux (assistant coach)
In-Charge person (3rd option):	Angela Stevens (parent, nurse, usually on site)
Call person (1st option):	Brad Fontaine (parent, cell xxx-xxxx)
Call person (2nd option):	Sheila Lachance (parent, cell xxx-xxxx)
Call person (3rd option):	Stefano Martinez (parent, cell xxx-xxxx)

Directions to Mercy General Hospital from Algonquin Municipal Park:





Roles and Responsibilities

❑ In-Charge Person

- ✓ Reduce the risk of further harm to the injured person by securing the area and shelter the injured person from the elements.
- ✓ Designate who is in charge of the other participants. If no one is available for this task, cease all activities and ensure that the participants are in a safe area.
- ✓ Protect yourself (wears gloves if he/she is in contact with body fluids such as blood).
- ✓ Assess ABCs (checks that airway is clear, breathing is present, a pulse is present, and there is no major bleeding).
- ✓ Wait by the injured person until EMS arrives and the injured person is transported.
- ✓ Fill in an accident report form.

❑ Call Person

- ✓ Call for emergency help.
- ✓ Arrange for transport by snowmobile for both emergency personnel and injured skier as appropriate.
- ✓ Provide all necessary information to dispatch (e.g. facility location, nature of injury, description of first aid that has been done, allergies and other medical information for that participant).
- ✓ Clear any traffic from the entrance/access road before ambulance arrives.
- ✓ Wait by the driveway entrance to the facility to direct the ambulance when it arrives.
- ✓ Call the emergency contact person listed on the injured person's medical profile.

6.7.3 Steps to Follow When an Injury Occurs

Note: It is recommended that emergency situations be simulated during practice to familiarize coaches and participants with the steps below.

❑ Step 1: Control the environment so that no further harm occurs

- ✓ Stop all participants.
- ✓ Protect yourself if you suspect bleeding (put on gloves).
- ✓ If outdoors, shelter the injured participant from the elements and from any traffic.

❑ Step 2: Do an initial assessment

If the participant:

- ✓ is not breathing;
- ✓ does not have a pulse;
- ✓ is bleeding profusely;
- ✓ has impaired consciousness;



**Activate
EAP!**



- ✓ has injured the back, neck or head;
- ✓ has a visible major trauma to a limb; or
- ✓ cannot move his/her arms or legs or has lost feeling in them.

If the participant does not show the signs above, proceed to Step 3

❑ **Step 3: Do a second assessment of the situation**

- ✓ Gather the facts by asking the injured participant as well as anyone who witnessed the incident.
- ✓ Stay with the injured participant and try to calm him/her; your tone of voice and body language are critical.
- ✓ If possible, have the participant move himself/herself off the playing surface. Do not attempt to move an injured participant.

❑ **Step 4: Assess the injury**

- ✓ Have someone with first aid training complete an assessment of the injury and decide how to proceed.
- ✓ If the person trained in first aid is not sure of the severity of the injury or there is no one present who has first aid training, activate EAP.
- ✓ If the assessor is sure the injury is minor, proceed to step 5.



**Activate
EAP!**

❑ **Step 5: Control the return to activity**

Allow a participant to return to activity after a minor injury only if there is no:

- ✓ swelling;
- ✓ deformity;
- ✓ continued bleeding;
- ✓ reduced range of motion; and
- ✓ pain when using the injured part.

❑ **Step 6: Record the injury on an Accident Report Form (see section 7.6) and inform the parents**



6.7.4 Emergency Action Plan Worksheet (working copy)

Emergency phone numbers: _____

Cell phone number of SDP Programmer: _____

Cell phone number of head coach: _____

Phone number of Daylodge at Ski Area: _____

Address of _____ Ski Area: _____

Address of nearest hospital: _____

In-Charge person (1st option): _____

In-Charge person (2nd option): _____

_____ :

_____ :

Directions to _____ Hospital from _____ Ski Area:







Emergency Action Plan Worksheet

Emergency phone numbers: _____

Cell phone number of SDP Programmer: _____

Cell phone number of head coach: _____

Phone number of Daylodge at Ski Area: _____

Address of _____ Ski Area: _____

Address of nearest hospital: _____

In-Charge person (1st option): _____

In-Charge person (2nd option): _____

_____ :

_____ :

Directions to _____ Hospital from _____ Ski Area:



6.8 Coach Liability

Introduction

More than ever before, coaches are aware of the risks and responsibilities they assume when they coach. These risks and responsibilities include those that are legal in nature. No matter what their certification, experience, employment or volunteer status, sport discipline or location of residence, coaches at all times have a legal obligation to provide a safe environment for participants.

To understand this obligation more fully, the coach must understand some key legal principles including negligence and liability. In order to fulfil this obligation, the coach must also understand concepts and techniques related to risk management. With this knowledge, the coach can determine the applicable standard of care, can assess his or her own coaching situation for risks, and can put in place appropriate measures to manage these risks.

Negligence

Negligence is a legal term with precise legal meaning. The term relates to standards of behaviour that the law expects, and understanding the law of negligence is an essential first step in learning how to provide a safe environment for participants.

In general terms, negligence refers to behaviour or action that falls below a “reasonable standard of care.” The law in Canada demands that we behave in a particular way so that others who might be affected by our actions are not exposed to an unreasonable risk of harm. The standard of behaviour the coach is expected to meet is what is termed an “objective” standard. As adults and as coaches, we are all credited with the same general intelligence and sensibility, and thus the law expects each of us to behave in a reasonable fashion when confronted with similar circumstances.

The law does not expect a coach to be perfect in his or her behaviour, only that the coach be reasonable and act as other reasonable coaches would act in the same circumstances.

It is widely accepted that there is a certain amount of risk in many sport activities and that such risk is knowable, foreseeable, acceptable and, depending on the sport, even desirable. What is unacceptable in sport is behaviour that places participants in a situation of unreasonable risk or danger.

A coach’s conduct is negligent when all four of the following conditions occur:

- a duty of care exists (such as that which exists between a coach and a participant);
- that duty imposes a standard of care that is not met by the coach;
- a participant or some other person experiences harm; and
- the failure to meet the standard can be shown to have caused or substantially contributed to the harm.

For the coach, the “standard of care” is the most important of the above elements. The standard of care is what the coach *should* do in a given situation. Standard of care is difficult to define precisely because it is influenced by the risk inherent in the surrounding circumstances. Thus,



the duty to act responsibly remains constant, but the specific behaviour required to fulfil that duty will change with the circumstances.

Determining what the “standard of care” is in any given circumstance involves looking to four sources:

- ❑ **Written standards** – these are government regulations, equipment standards, rules for a particular sport or facility, rules from a sport governing body, coaching standards and codes of conduct, and other internal risk management policies and procedures.
- ❑ **Unwritten standards** – these are norms or conventions in a sport, an organization or a facility that might not be written down, but are nonetheless known, accepted and followed.
- ❑ **Case law** – these are court decisions about similar situations. Where the circumstances are the same or similar, judges must apply legal principles in the same or similar ways. Earlier decisions of the court are a guide, or precedent, for future decisions where the facts are similar.
- ❑ **Common sense** – this means simply doing what feels right, or avoiding doing what feels wrong. Common sense is the sum of a person’s knowledge and experience. Trusting one’s common sense is a good practice.

The responsible and prudent coach is familiar with written policies that govern him/her, is aware of unwritten norms and practices, knows something of the case law as it applies to coaches and has learned to trust his/her intuitive judgment and common sense.

Liability

Where all four conditions of the legal definition of negligence have been met, negligence of the coach may be established. What follows then is the question of liability. While negligence refers to conduct, liability refers to the responsibility for consequences of negligent conduct. Responsibility may lie with the coach who was negligent, or with another person or entity entirely.

For example, an insurance policy transfers the financial liability for negligence to an insurance company. A valid waiver of liability agreement might eliminate liability entirely. An injured participant may be partially responsible for his or her injuries and thus may share liability with the negligent coach. And a sport organization may be vicariously liable for the negligent actions of its coach, whether he or she is an employee or a volunteer.

Liability can also refer to responsibility for the consequences of conduct that fails to meet a predetermined legal standard other than the standard of care in a situation where negligence occurs. In addition to arising from negligence, liability can arise when a law is broken or a contract has been breached. The prudent coach avoids these types of liability by obeying laws and complying with contractual agreements

In summary, an understanding of the legal meaning of negligence answers the coach’s question: “How does the law expect me to behave?” The follow-up question is: “How can I be sure that my behaviour will meet this expectation?” The answer to this question lies in risk management.



6.9 Risk Management

Risk management is about taking steps to avoid risks. This involves spending time thinking about potentially risky situations, deciding which situations might pose serious risks and determining what steps to take to minimize those risks. The common ingredient in all these tasks is common sense.

There are four strategies for controlling risks, all of which are important to the coach:

- ❑ **Retain the Risk** – the risk is minor and it is inherent in the sport activity and the coach is willing to accept the consequences, so he/she does nothing about the risk. In sport, this is often a legitimate risk-management strategy.
- ❑ **Reduce the Risk** – the risk is moderately significant and the coach takes measures to reduce the likelihood of the risk occurring or minimizes its consequences if the risk occurs; the coach does this by planning carefully, supervising participants appropriately and educating participants.
- ❑ **Transfer the Risk** – the risk is significant and it is transferred to others through contracts, including waivers and insurance.
- ❑ **Avoid the Risk** – the risk is severe and the coach decides to avoid whatever may cause the risk.

A word of caution for coaches: there is no template, formula or checklist for managing risk. The law expects coaches to provide a safe environment for participants, but what that means for a coach's conduct will vary with the circumstances, including the age and skill level of participants and the environment in which the coaching activity occurs.

The Coach's Personal Risk Management Plan

The informed and prudent coach protects himself/herself by implementing a personal risk management plan. This plan helps the coach in two ways. First, it will promote a safe program and help to prevent injuries from occurring. Second, it will help to protect the coach from liability claims when an injury cannot be prevented.

Coaches can, and should, practise their own personal risk management by following this ten-point plan:

- 1) Be familiar with and adhere to applicable standards, both written and unwritten, as well as internal policies and rules governing the facility, the sport and your program.
- 2) Monitor your participants' fitness and skill levels, and teach new skills in a progressive fashion suitable to their age and skills. Never leave young participants unsupervised.
- 3) If you do not have access to medical personnel or a qualified trainer, keep adequate first aid supplies on hand; ideally, you should be trained in administering first aid.
- 4) Develop an Emergency Action Plan for the facility or site where you regularly hold practices or competitions. Carry with you, at all times, emergency contact numbers and participants' medical profiles.



- 5) Inspect facilities and equipment before every practice and competition and take steps to ensure deficiencies are corrected immediately, or adjust your activities accordingly to avoid the risk.
- 6) Work with your employer or sport organization to use appropriately-worded assumption-of-risk agreements in your programs. Where appropriate (in settings involving adult participants) develop and use agreements waiving liability.
- 7) You should be covered by the liability insurance policy of your employer (if you are remunerated for your coaching services) or your organization (if you are a volunteer coach). Confirm that this is the case. If it is not, obtain your own insurance.
- 8) Do not be afraid to stop or withdraw from any activity that poses unreasonable risks, including stopping a practice or removing your team or your participants from a competition.
- 9) Trust your common sense and intuition!
- 10) Actively pursue your own training, professional development and coaching certification.



6.10 Legal Questions and Answers (FAQ)

The following are frequently asked legal questions about coaching. Answers to these questions have been provided by the Centre for Sport and Law.

1) **What are the major differences between provinces/territories regarding the law and how does this impact me as a coach?**

Laws in Canada can be divided into public laws (those laws that govern relations between the state and individuals) and private laws (those laws that govern relations between and among individuals and private entities – this area of law is also referred to as civil law). In Canada, public laws are generally in federal jurisdiction while private laws are generally in provincial jurisdiction.

The most well-known body of public law in Canada is the Criminal Code: this applies to everyone, regardless of province/territory of residence. Civil law varies from province/territory to province/territory, but not greatly. Examples of civil law relevant to coaches and varying slightly from one province/territory to another include human rights law, occupier's liability and the law of defamation.

An important distinction between criminal law and civil law is that there is a different 'standard' of proof, where the standard of proof refers to the certainty with which something must be proven. In criminal matters, guilt must be proven "beyond a reasonable doubt" (a fairly high standard), while in civil matters, fault must be proven "on a balance of probabilities" which means with a certainty that is greater than 50 percent. This is a lower standard of proof than the criminal standard. Thus, a person charged with a criminal offence could be found not guilty, while the same allegation made under civil law might be upheld.

In criminal law penalties are imposed and may include fines, restrictions on activities, restitution (paying back the person harmed), or imprisonment. In civil law, the penalties take the form of monetary compensation. The amount of compensation will depend on the cost to reimburse the harmed person for their expenses and lost income, and will also attempt to place a monetary value on any injury that the person sustains. The courts can also require a person to perform a certain service (such as following through with a contractual promise) or to refrain from doing something in the future.

2) **Are paid/contracted coaches subject to a different standard than are volunteer coaches?**

Yes and no. Paid and volunteer coaches of equivalent knowledge, skill and certification, performing equivalent duties within a sport setting, will likely be held to the same legal standard of care. They will, however, have different entitlements and privileges in other areas of the law – for example, a volunteer does not have the rights an employee has under employment standards legislation.

Depending upon the circumstances of a coaching activity, paid and volunteer coaches could be held to the same or similar standard. However, coaches who are paid and coaches who are not paid will usually have different duties, obligations and scope of authority. This will influence the standard of care to which they will be held. This standard is not dictated by



whether or not they receive payment for their services, but rather is dictated by the scope of the coach's responsibility and the nature of the relationship between the coach and the participant. The standard of care is constant in that it is always a reasonable standard; however, what is reasonable will vary according to the circumstances in which the paid coach and the volunteer coach find themselves.

3) Are coaches who are also physical educators held to a different standard?

Yes and no. Children are required by law to go to school and when in school they are under the authority and care of school officials, including teachers. Thus, a teacher has a statutory duty to stand in loco parentis, a legal term meaning that he or she stands in the place of a parent with respect to his or her students. As such, teachers have duties and responsibilities equivalent to that of a "prudent parent", and must behave as a parent would behave in caring for their child. Coaches who are not in a school setting do not stand "in loco parentis" in the same way that teachers do, and are not required to meet this statutory duty.

However, both coaches and teachers have specialized skills and knowledge and have a responsibility to provide a reasonable standard of care. The standard of care for anyone is determined by written standards, unwritten standards, case law and common sense. The coach who is also a teacher will be held to written and unwritten standards that govern coaching (such as coaching manuals, rules of the sport, coaching code of conduct) as well as written and unwritten standards that apply to teachers (such as teacher manuals, school board policies, and duties imposed by statute upon teachers). The coach in the school setting must fulfil both roles and must adhere to standards that apply to both coaching and teaching activities.

4) How would a judge describe a "reasonable and prudent person" when referring to a coach?

A coach will be held to an objective standard of behaviour that is what an average and reasonable coach would do, or not do, in the same circumstances. Black's Law Dictionary defines 'reasonable care' as that degree of care which a person of ordinary prudence would exercise in the same or similar circumstance. A coach has special skills and knowledge and is not the same as a "person of ordinary prudence", thus the reasonable standard for the coach will be that standard expected of reasonably prudent coaches having similar knowledge and skill and finding themselves in similar circumstances.

Keep in mind that the standard is objective, meaning that it is determined not by what a coach did or did not do in a situation, but by what a coach ought to have done, or ought not to have done. It might be tempting to believe that if a coach obtains less training and gains less knowledge, he or she will be held to a lesser standard. This is not the case, as the circumstances may well require a coach of greater knowledge and skill, and that will form the benchmark against which the coach's conduct will be measured.

5) Are there differences in liability if you are a head coach or an assistant coach?

Yes. The head coach and assistant coach have different degrees of responsibility and authority. The behaviour required to meet the standard of care is influenced by this.





6) What is jurisprudence?

Technically, jurisprudence is defined as the “philosophy of law” or the “science of law”. For everyday purposes, jurisprudence refers to legal principles and how they have evolved over time. The law is not static; it continually evolves to reflect changing community standards. Jurisprudence refers to the principles that are reflected in our laws, both in legislation and in common law (also referred to as “judge-made” or the accumulated body of court decisions).

7) If I am required to sign multiple codes of ethics or conduct, to which will I be held, or will I be held to all?

You will be held to all of the codes you execute, within the specific jurisdiction in which they have been signed. In other words, if you sign a code with your provincial sport body, it may hold you to it for the activities you undertake for it or within its jurisdiction. If you sign a code for a local sport club, it may hold you to it for activities you undertake with and for the club.

There may also be situations where your activity is subject to two or more codes at the same time, such as if you are coaching at the Canada Games. Unless the codes specify clearly which one might take precedence, or “trump” the others, then all may apply simultaneously. This can create difficulties if any of the terms in different codes are contradictory.

8) Is special liability insurance a requirement for coaches?

Special liability insurance is not a requirement for coaches, but is highly recommended as a risk management measure. Ideally, organizations that employ or engage coaches should include the coach as an insured party under their general liability insurance policy. Coaches should confirm this is the case and if it is not, the coach should insist that the policy be revised accordingly. As a last resort, an individual coach can purchase his or her own insurance, but this may be difficult to obtain and expensive.

9) What happens if I am uninsured? Are my personal assets at risk?

The purpose of liability insurance is to cover the costs that individuals might have to pay in the event they are sued, or are required to compensate another person for loss or damage. Insurance may also cover the costs to defend oneself or to otherwise respond to an allegation of wrongdoing, even where such an allegation may prove to be untrue.

The vast majority of coaches never find themselves in situations where they need insurance. However, if they do and they are not covered by an insurance policy, then they will be personally responsible for paying these costs. This could mean tapping into savings and other personal assets.

It is also important to note that insurance policies and coverage vary widely and a given insurance policy may not cover all of the coach’s circumstances or all financial obligations.





10) What are my responsibilities if an accident occurs? Must I accompany a participant to the hospital?

The coach's responsibilities begin long before an accident occurs. The coach should have an Emergency Action Plan that identifies who does what in the event of an accident, and should have on hand all the necessary information to contact emergency and medical authorities as well as parents/guardians, and to inform medical professionals of the medical history of the injured person.

A coach does not necessarily have an obligation to accompany a participant to the hospital; it will depend on the nature and severity of the injury, whether or not there is another responsible person available to accompany the participant, and whether the remaining participants can be properly supervised should the coach be required to leave. The coach will have to make informed decisions about these matters depending on the circumstances; the Emergency Action Plan provides guidance for this decision-making, which is why it is so important to have prepared in advance.

11) What are the most commonly occurring cases where coaches require legal assistance?

Coaches most frequently need legal assistance to deal with employment matters such as employment contracts and termination. They also seek assistance to deal with allegations of harassment and misconduct matters. On occasion, coaches require legal assistance when implicated in a lawsuit from a person who has been injured and is seeking compensation.

12) What are the key preventive measures a coach can take to protect himself/herself?

The competent, informed and prudent coach practises his or her own personal risk management as described in the NCCP materials. A ten-point plan is presented there that lays out an array of risk management techniques accessible to all coaches. A coach protects himself or herself through gaining knowledge about negligence and liability, and applying techniques to identify and control risks in the coaching environment.



REFERENCES

Coaching Association of Canada, *NCCP Level 1 Coaching Theory manual*, Ottawa, 1989.

Hypothermia. Sports Medicine Council of BC

The Centre for Sport and Law, Brock University, St. Catharines, Ontario.

Windchill and Minutes to Frostbite Charts The Meteorological Service of Canada
http://www.msc-smc.ec.gc.ca/msc/contents_e.html, 2004

Some images and pictures contained in this document are the property of CARDISPORT or HEMERA TECHNOLOGIES INC. and are copyrighted.

Niemi, A. *Technique Illustrations*, 2004.

