

## MEMORANDUM

TO: **NORDIC** Ski Championship Teams & Individuals

FROM: MPA Ski Committee  
Scott Walker, Chair

DATE: February 14, 2017

SUBJECT: State Nordic Ski Championships

Congratulations and welcome to the schools and individuals that will be competing in the upcoming Nordic ski championships! Below please find some general information that should help answer some of your questions. Please share this information freely with your coaches, athletes, and parents. If you have any questions, please don't hesitate to contact Scott Walker (207-443-8250 or [swalker@rsu1.org](mailto:swalker@rsu1.org)) or Mike Burnham at the MPA office (622-0217, ext. 25 or [mburnham@mpa.cc](mailto:mburnham@mpa.cc)).

**2017 NORDIC SKI SCHEDULES:** Attached to this memo you will find updated championship schedules for the Nordic meets. This year, for the first time, we will be running separate Nordic and alpine championships. This memo is specifically for the Nordic events.

**QUALIFYING FOR INDIVIDUAL EVENTS:** For the 2017 Nordic championships, athletes competing in the championship races must have competed in at least one meet in the event during the regular season. Waiver requests for skiers who were NOT able to ski in one meet must be submitted to the MPA office.

**ENTRY FEES:** Fees this year remain at \$375 per team and \$125 per individual if you don't have a full team. Training fees at the Nordic venues on the days before the events are determined at each site.

**COACHES' ELIGIBILITY:** Any coach that is working with athletes must be listed on the MPA coaches' eligibility form submitted by the school. Two of the MPA eligible coach will be issued a bib to wear during the Nordic races.

**COACHES' MEETINGS:** The coaches' meetings each day are extremely important to get directions from the officials. **Please make sure that one coach from your team attends these meetings.**

**ENTRY FORMS:** These must be submitted to the MPA office on or before February 15, 2017. Any athlete competing as an individual must use the standard entry form and must include a coach who meets eligibility standards and accompanies the athlete to the meet. In the transition to separate championships, the entry process will still utilize the same software and process for this year.

**RULES:** All championship meets are governed by the Maine Interscholastic Skiing Rules and the MPA Ski Bulletin. Copies of the 2017 Ski Rule Book and the 2017 Ski Bulletin may be found on the MPA website: [http://www.mpa.cc/images/bulletins/bulletin\\_ski.pdf](http://www.mpa.cc/images/bulletins/bulletin_ski.pdf) and <http://www.mpa.cc/index.php/interscholastic-activities-and-committees/skiing/ski-rule-book>

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**SPORTSMANSHIP:** All competitors and coaches are expected to conduct themselves in a respectful and sportsmanlike manner. Swearing or other unsportsmanlike behavior will cause a competitor to be disqualified and to lose any points earned during the meet. Sportsmanship voting is now underway and will be open through February 17.

**LODGE SPACE / CONCESSIONS:** Space is limited at all of the sites. Each venue has their own concession stand where food will be available. Tailgating (including the use of electrical appliances) in any of the lodges is **not permitted** and schools and/or families are asked to occupy no more than one or two of the available tables in the lodge. Teams wishing to tailgate may do so in the parking areas. ***Please share this information with any ski booster/parent groups well in advance of the championship events.***

**BIBS:** All bibs must be worn outside of the clothing and must be clearly visible with the numbers showing. Two MPA eligible coaches will be issued bibs for course access in the Nordic races. In a Nordic race coaches with bibs will be allowed to run on the side of the course with their athlete for up to 30 meters.

**WAXING:** Only those ski coaches meeting MPA Coaches' Eligibility Standards and parents of athletes listed on the ski team roster may wax skis at the ski meet. A competitor may wax his/her skis during the race without assistance from another person.

**T-SHIRTS:** Action Screen Printing t-shirts and sweatshirts will be on sale at the state championship site.

**VIDEO:** No video evidence will be allowed during a protest.

### DIRECTIONS:

#### Quarry Road

##### From I-95:

- Take I-95 Exit 130 (Waterville - Main Street)
- Turn south onto Main Street, toward downtown Waterville, for 0.6 mi
- Turn right onto Eustis Parkway for 0.6 mi
- Turn right onto North Street for 0.1 mi
- Turn right onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

##### From Downtown Waterville:

###### *via Main Street*

- Head north on Main Street
- Turn left onto North Street for 1 mi
- Turn right onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

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### *via College Avenue*

- Follow College Avenue to Oak Street, across from the rail yard
- Turn left onto Oak Street for 0.3 mi
- Continue straight onto Eustis Parkway for 0.6 mi
- Turn right onto North Street for 0.1 mi
- Turn right onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

### From Colby College:

- Head northeast on Mayflower Hill Drive, leaving campus at the baseball field
- Continue straight onto North Street for 0.5 mi
- Turn left onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

### From KMD, Oakland, and points west:

- Follow Kennedy Memorial Drive (Route 137 / 11) to Washington Street
- Turn left onto Washington Street for 1.6 mi
- Bear right at Armstrong Road, continuing on Washington Street / Campus Drive for 0.5 mi
- Turn left at Mayflower Hill Drive and continue straight onto North Street for 0.5 mi
- Turn left onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

### From Winslow and points east:

#### *Via Downtown/Bridge Street*

- Cross the Kennebec River into Waterville on Bridge Street (Route 201)
- Turn right onto Front Street for 0.6 mi
- Continue straight, merging onto College Avenue for 0.3 mi
- Turn left onto Oak Street for 0.4 mi
- Continue straight onto Eustis Parkway for 0.6 mi
- Turn right onto North Street for 0.1 mi
- Turn right onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

#### *Via Carter Memorial Bridge*

- Cross the Kennebec River on Carter Memorial Drive (Route 137)
- Turn left onto Kennedy Memorial Drive for 0.7 mi
- Turn right onto First Rangeway for 1.1 mi
- Turn left onto Mayflower Hill Drive, continuing straight onto North Street for 1.7 mi
- Turn left onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

### From College Avenue, Fairfield, and points north:

- Follow College Avenue to Oak Street
- Turn right onto Oak Street for 0.4 mi
- Continue straight onto Eustis Parkway for 0.6 mi
- Turn right onto North Street for 0.1 mi
- Turn right onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

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### From Thomas College, Sidney, and points south:

- Follow West River Road (Route 104) to Kennedy Memorial Drive
- Turn left onto Kennedy Memorial Drive for 0.7 mi
- Turn right onto First Rangeway for 1.1 mi
- Turn left onto Mayflower Hill Drive, continuing straight onto North Street for 1.7 mi
- Turn left onto Quarry Road for 1.3 mi
- Arrive at the Quarry Road Welcome Center Yurt

### From Fairfield Center and points north:

- Follow Route 104 to the I-95 Exit 130 interchange
- Follow the I-95 directions, above

### **Sugarloaf Outdoor Center**

Located 1 mile south of the Sugarloaf access road. Sign on south side of Rt. 27. Follow gravel drive 3/4 mile to parking area at lodge.

Most GPS systems and navigation programs will get you here using 3001 Touring Center Road, Carrabassett Valley Maine 04947.

**2017 MAINE PRINCIPALS' ASSOCIATION  
SKIING CHAMPIONSHIPS SCHEDULE  
"CLASS A & Class C NORDIC"**

*Start times may be altered only by the Jury.  
All coaches will be notified as events are changed or updated.*

**DAY ONE:**

**Thursday, February 23 -- Nordic Classical Competition**

11:30 a.m.	Nordic Coaches' meeting at Quarry Road, Waterville
1:00 p.m.	Boys' Nordic Classical (Individual 15-Second Interval Start)
2:30 p.m.	Girls' Nordic Classical (Individual 15-Second Interval Start)

**DAY TWO:**

**Friday, February 24 - - Nordic Freestyle Competition**

9:00 a.m.	Nordic Coaches' meeting at Quarry Road, Waterville
10:00 a.m.	Boys' Nordic Freestyle (Individual 15-Second Interval Start)
11:00 a.m.	Girls' Nordic Freestyle (Individual 15-Second Interval Start)

***Nordic Awards will be presented at the conclusion of the girls' races.***

**2017 MAINE PRINCIPALS' ASSOCIATION  
SKIING CHAMPIONSHIPS SCHEDULE  
"CLASS B NORDIC"**

*Start times may be altered only by the Jury.  
All coaches will be notified as events are changed or updated.*

**DAY ONE:**

**Thursday, February 23 -- Nordic Classical Competition**

11:30 a.m.	Nordic Coaches' meeting at Sugarloaf Nordic Center
1:00 p.m.	Boys' Nordic Classical (Individual 15-Second Interval Start)
2:30 p.m.	Girls' Nordic Classical (Individual 15-Second Interval Start)

**DAY TWO:**

**Friday, February 24 - - Nordic Freestyle Competition**

9:00 a.m.	Nordic Coaches' meeting at Sugarloaf Nordic Center
10:00 a.m.	Boys' Nordic Freestyle (Individual 15-Second Interval Start)
11:00 a.m.	Girls' Nordic Freestyle (Individual 15-Second Interval Start)

***Nordic Awards will be presented at the conclusion of the girls' races.***



February 6, 2017

Re: 2017 Maine High School Class B Nordic State Championships

To All Coaches and Nordic Athletes:

The Sugarloaf Outdoor Center Family welcomes you to our facility. We look forward to your visit on February 23 & 24 to compete for the Class B State Championships. We are excited to host this highlight of your season.

In preparing for your visit please be aware of the following:

- We will be enforcing Rules as set forth by the Maine Principals' Association, and as such, the Event Jury will be comprised the Technical Delegate, Christopher Parks as Chief of Course, and an MPA Designated Committee Member.
- A Coaches Meeting to be held in the Upstairs Office of the Nordic Lodge at 11:30am on Thursday, February 23, 2016 prior to the start of the Girls Classic Competition. A second Coaches Meeting for Friday Morning will be held at 9am.
- Our Lodge will be open from 8am to 8pm during the Competitions, offering our Retail Shop, the Bull Moose Cafe, and the Great Room. We will be open to the public at the time of the Races, and we ask that all large gear bags remain with your bus as storage in the building becomes limited. Please do not stack bags around lodge tables in effort to 'claim' tables. We ask that teams and parents make preparations for any Tailgating to occur with the team transportation.
- We will have portable toilets set up near the Stadium for the competitors to use as priority, The bathrooms in the Lodge are available but we ask they not be overtaken as changing rooms for teams.
- Waxing Accommodations:
  - o We have one Wax Room that will be for the general public only during daytime hours, but will be available for shared use by Teams early mornings and evenings.
  - o Please plan to prepare equipment with your buses or in the open areas surrounding the stadium Start/Finish Areas. There are two electrical

supply gang boxes located around the Bus Parking Area that will be available, so we encourage you to bring extension cords to make the power accessible.

- There will be a nearby trail segment prepared to allow for wax testing.
- Our shop will have wax for purchase, but we do not carry much within the high-end racing wax line. Our Staff will be able to offer repair services if needed, but will not be offering any rushed competitor waxing services.
- Ten minutes prior to the start of the race the course will be closed to all ski traffic. Any spectators wishing to be out on the course may do so as long as they remove themselves from the groomed lanes and remain in that position during the entire run until the course is cleared with the final racer. Bibbed Coaches may ski the course as necessary during active competition.
  - **All individuals (Coaches & Athletes) shall maintain course direction at all times and will not be allowed to ski any part of the course in reverse direction regardless of during race events or between events.**
  - **There shall be no standing on the Overpass Bridge by Coaches or Spectators, and the approach hill to the overpass shall not be impeded by spectators.**
- If weather is pleasant we will host the awards ceremony outside on the deck with room for team photos. Otherwise will move inside to present final results for the day. We expect for this to occur around 12:30pm Friday if race results are finalized at that time, or soon thereafter as announced.
- We expect to use our 2.6km Homologated Race Loop to host both the Classic & Freestyle Races; each race making two laps around the course for a race length of 5.2km. The course will be prepared with 1 Classic Track and room for Skating on Wednesday, 2/22 for training purposes. A Race Course Map will be available with the MPA Competition Materials and located on our Events Page at : <http://sugarloaf.com/activities-and-nightlife/outdoor-center/outdoor-center-events>
- There is a team practice rate of \$10/day/member available prior to race days and available for non-racing team members during the competitions. **Any individual wearing skis shall display a Race Bib during the competition or shall have acquired a Trail Pass.** Comp Trail Passes will be provided to Coaches for their Team Racers on Race days for when the Bibs have been removed post-race.
- Parking will be very limited during large events. We will have a shuttle to overflow parking lots offsite, but we would encourage visitors to carpool to the greatest extent possible. We ask for all guests to avoid parking vehicles on our access road to maintain safe traffic circulation. There also is a shuttle that circulates from the Alpine Resort that will be available to transport spectators down for viewing.



- The Bull Moose Cafe will be offer a Race Day lunch special to team members. Cost will be \$9 and include chili, a meat or veggie wrap, a cookie and lemonade. Tickets will be available for pre-purchase prior to the Coaches Meetings if teams wish to pay collectively. Invoicing is possible if prior arrangements are discussed.
- We have had several inquiries and will be offering a spaghetti dinner the evening of Thursday, 2/23 at 5:30pm. If your group wishes to attend, please provide a headcount by the end of Wednesday, 2/22. Cost will be \$10/head. Please email me at [cparks@sugarloaf.com](mailto:cparks@sugarloaf.com) for details or reservations.
- The Sugarloaf Outdoor Center has a strict NO DOG policy. With the exception of Service Dogs, no dogs will be allowed in the facility, in the Stadium Start/Finish Areas, or on our trails.

If you have any further questions, please feel free to call me via my cell phone (207-649-4810) or email me and we look forward to your arrival next week.

Thanks,  
Chris

**Christopher Parks**

*Sugarloaf since 1990*

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**Nordic Manager**  
**Sugarloaf Outdoor Center**  
5092 Access Rd  
Carrabassett Valley, ME 04947  
c:(207)-649-4810



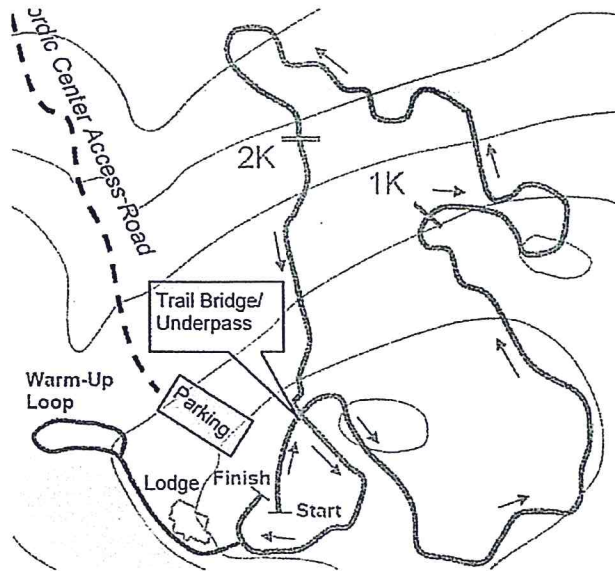
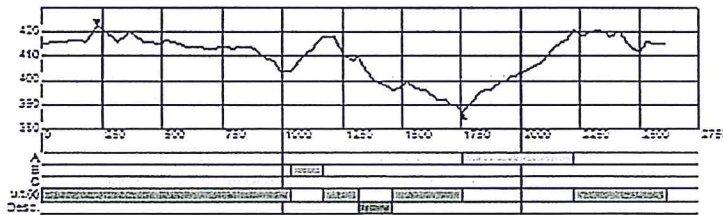
# CERTIFICATE

## OF FIS HOMOLOGATED CROSS-COUNTRY COURSE FIS CROSS-COUNTRY COMMITTEE



- (1) Registration Number: 11/08.01/2,5
- (2) Location of the competition site: Carabassett Valley, Maine
- (3) Organizer: Sugarloaf Outdoor Center
- (4) National Ski Association: United States Ski & Snowboard Association
- (5) Contact person in the organizing committee: David Cota
- (6) Homologation inspector: John Morton and David Lindahl
- (7) Name of course: Sugarloaf
- (8) Description of course:

Course length:	2614 m	Height Difference (HD):	35 m	Lowest point:	387 m
Category:	D	Maximum Climb (MC):	34 m	Highest point	422 m
Competition Level:	COC	Total Climb (TC):	78 m		



FIS Office  
p.o. *J. Capol*  
Jürg Capol

FIS Stamp

Internat. Ski Verband FIS  
Blochstrasse 2 / Postfach  
CH-3653 Oberhofen

FIS Homologation Responsible

*Hermod Bjørkestøl*  
Hermod Bjørkestøl

Date of Issue  
26.08.2011  
Valid until  
30.06.2016



# FIS CROSS COUNTRY COMMITTEE

## Subcommittee for Rules and Control



### DOCUMENTATION OF HOMOLOGATED CROSS COUNTRY COURSES

- (1) Registration Number:
- (2) Location of the competition site: Carabassett Valley, Maine, USA
- (3) Organizer: Sugarloaf Outdoor Center
- (4) National Ski Association: USSA
- (5) Contact person in the organizing committee: David Cota
- (6) Homologation inspector: John Morton and David Lindahl
- (7) Name of course: Sugarloaf
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Course length:	2614m	Height Difference (HD):	35m	Lowest point:	387m
Category:	D	Maximum Climb (MC):	34m	Highest point:	422m
Competition Level:	COC/FIS	Total Climb (TC):	78m		

(9) Overview of the uphill

- major uphill
- shorter uphill
- undulated terrain

No.	PTC	%	%
1	34	43.59	
1	14	17.95	
u.t.	30	38.46	

(10) Stadium area

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>- fixed stadium.....<input checked="" type="checkbox"/></li> <li>- fixed building.....<input checked="" type="checkbox"/></li> <li>- temporary stadium.....<input type="checkbox"/></li> <li>- temporary building.....<input type="checkbox"/></li> <li>- good infrastructure (access, parking, media, etc.).....<input checked="" type="checkbox"/></li> <li>- skitesting area near the stadium.....<input checked="" type="checkbox"/></li> <li>- warm up track near the stadium.....<input checked="" type="checkbox"/></li> </ul> | <p>indoor working room for</p> <ul style="list-style-type: none"> <li>- timekeeping.....<input checked="" type="checkbox"/></li> <li>- calculation.....<input checked="" type="checkbox"/></li> <li>- announcer.....<input checked="" type="checkbox"/></li> <li>- media.....<input checked="" type="checkbox"/></li> <li>- jury.....<input checked="" type="checkbox"/></li> <li>- others.....<input checked="" type="checkbox"/></li> </ul> |
|--|---|

(11) Category for the stadium and course layout

- |   |                                     |                                     |                                     |                                     |                                     |
|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
|   | Individual                          | Sprint                              | Pursuit                             | Relay                               | Masstart                            |
| Stadium: suitable for following starting procedures     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Course: suitable for following competition formats with |                                     |                                     |                                     |                                     |                                     |
| a) classical technique                                  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) free technique                                       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| suitable for mixed relay and pursuit competition        |                                     |                                     |                                     |                                     |                                     |
| a) on the same course.....                              |                                     |                                     |                                     |                                     | <input type="checkbox"/>            |
| b) combined with a separat course.....                  |                                     |                                     |                                     |                                     | <input type="checkbox"/>            |
| Category:.....  |                                     |                                     |                                     |                                     | D                                   |

(12) Possibility of snow making

- |   |   |
|---|---|
| Stadium area..... <input checked="" type="checkbox"/> | Course..... <input checked="" type="checkbox"/> |
|---|---|

(13) Substitute course available.....

(14) Map material in accordance to art 313.4.3 ICR

- |  |  |
|--|--|
| very good..... <input checked="" type="checkbox"/> | sufficient..... <input type="checkbox"/> |
|--|--|

(15) Date of the final inspection:

November 10,2010

(16) Closing of the homologation procedure:

(17) Date of the FIS-License:

# Data of the course profile



Data		Remarks of the inspector				
Name of the course	Sugarloaf					
Competition distance	2614 m					
Number and length of the laps	1					
Height difference (HD)	35 m					
Maximum climb (MC)	34 m					
Total climb (TC)	78 m					
Lowest point	387 m					
Highest point	422 m					
<b>A</b>	at m	PHD	PTC	gradient	average gradient	Remarks of the inspector
major uphill with: 30 m - 50 m MP and Ø 6.00 - 12.00% gradient in accordance to ICR 313.1	1. 1756	34	34	3.23-14.81	7.39	
total					43.59%	part of TC
<b>B</b>	1. 1037	14	14	7.69-12.00	10.45	
shorter uphill with: 10 m - 29 m MP and Ø <18.00% gradient in accordance to ICR 313.1						
total					17.95%	part of TC
<b>C</b>						
steep uphill with Dist. <= 30 m and Ø > 18.00% gradient in accordance to ICR 313.1						
undulated terrain			30			
total			30			38.46% part of TC
total climb					100.00	0



**INTERNATIONAL SKI FEDERATION**

Blochstrasse 2  
3653 Oberhofen/Thunersee  
Switzerland

Phone: +41 (33) 244 61 61

Fax: +41 (33) 244 61 71

**United States Ski & Snowboard Association**

1 Victory Lane  
Box 100  
Park City, Utah 84060  
USA

28 September 2011

**Homologation of Cross-Country Courses**

Dear Skifriends,

We are pleased to inform you about the successful homologation of the Cross-Country course in Carabassett Valley, Maine (USA). The homologation is valid for 5 years until 30.06.2016.

**Carabassett Valley, Maine**

**11/08.01/2.5                      2.614 km**

Please forward this certificate to the OC in Carabassett Valley, Maine for information.

If you have any questions, please do not hesitate to contact the FIS Office.

Kind regards,

INTERNATIONAL SKI FEDERATION

  
Judith Lessing  
Administrative Assistant



February 3, 2017

Re: 2017 Maine High School Class A and C Nordic State Championships

To All Coaches and Nordic Skiers:

Central Maine Ski Club and Friends of Quarry Road welcome you to Quarry Road Trails. We are thrilled for the opportunity to host this championship event and want to make sure this is a positive experience for Maine's Nordic community.

Please refer to the following Virtual Coaches Meeting for information on the races and venue:

[https://docs.google.com/document/d/1TGgAQosXE\\_9byDxo5bM93N6-xvjKwf2kgazkXlMaHwY/edit?usp=sharing](https://docs.google.com/document/d/1TGgAQosXE_9byDxo5bM93N6-xvjKwf2kgazkXlMaHwY/edit?usp=sharing)

This document will be updated regularly with announcements and important information. In addition, please be aware of the following:

-Quarry Road Trails offers half price trail passes for all spectators and parents on February 23 and 24. We encourage you to purchase a trail pass and support our fantastic trail system.

-Trail passes are not necessary for racers and coaches on competition days. Teams can ask about reduced rates for training visits prior to the championship races. Please see [www.quarryroad.org](http://www.quarryroad.org) for more information.

-The venue does not have wax rooms available at this time.

-Trails used for races will be closed during competition. All other trails in the venue are open to ALL skiers during race day.

# Guidelines for Competition in the Cold

BY CARY S. KELLER, M.D.

Cold weather is not usually a barrier to athletic activity, but team and individual sports played in the late fall, winter and early spring place a large number of athletes at risk for cold injury. Environmental changes as simple as sunset, a rainstorm or an increase in wind speed can shift the body's thermal balance suddenly. As part or all of the body cools, there can be diminished exercise performance, frostbite, hypothermia and even death. Frostbite and hypothermia represent 20 percent of all injuries in Nordic skiers.

## Physiological Response to Cold

Cold exposure produces peripheral vasoconstriction, decreasing peripheral blood flow, and decreasing convective heat loss from the body's core to its shell. Cold exposure also elicits increased heat production through skeletal muscle activity. This occurs through involuntary shivering (which can increase heat production six-fold) and through voluntary increased activity.

Athletes exposed to cold repeatedly can exhibit cold acclimatization, in which both cold-induced vasoconstriction and shivering are blunted. Compared to heat acclimatization, cold acclimatization is less pronounced, slower to develop and less effective in defending normal body temperature and preventing thermal injury.

## Cold Injury

**Frostbite** occurs when tissue freezes. Frostbite can be in exposed skin, e.g. nose, ears, cheeks, but also occurs in hands and feet, because vasoconstriction lowers peripheral tissue temperature significantly. Numbness or a "wooden" feeling is usually the first symptom of frostbite in the hands and feet. With frostbite to exposed facial skin, however, there can be a burning feeling. Freezing of the tissue is often relatively painless. Re-warming is accompanied by sharp, aching pain and persistent loss of light touch sensation.

The risk of frostbite increases as temperature decreases. With appropriate precautions, the risk of frostbite can be less than five percent when ambient temperature is above 5 degrees F. But increased surveillance of athletes is appropriate when the wind chill falls below minus 18 degrees F, since exposed facial skin then freezes in 30 minutes or less. At these temperatures, consideration should be given to postponing or shortening athletic events. Predetermined school policies bring neutrality to that decision and help the public to anticipate

it. Several apps are available for calculation of wind chill.

**Hypothermia** is core temperature below 35C (95F). In mild hypothermia, an athlete feels cold, shivers, is apathetic and withdrawn, and demonstrates impaired athletic and mental performance. Coaches and athletes must recognize and respond to these early symptoms so as to avoid more severe hypothermia. The symptoms can be confused with concussion, hypoglycemia or drug use. As core temperature continues to fall, there is confusion, sleepiness, slurred speech and irrational thinking and behavior. Severe hypothermia causes cardiac arrhythmia and arrest. Efforts to resuscitate must persist until re-warming has been achieved.

## Risk factors for Frostbite and Hypothermia

- 1) Exercising in water, rain and wind. Evaporation from wet clothing in a cold environment increases heat loss four-fold.
- 2) Lean athletes lack the insulation provided by fat and muscle mass and have more difficulty maintaining core temperature.
- 3) Fatigue, energy depletion, sleep deprivation and many endocrine disorders produce hypoglycemia. Hypoglycemia impairs muscular activity and shivering, decreasing heat production.
- 4) Physical fitness and strength training allow longer exercise at high intensity with prolonged heat production and maintenance of core temperature. Poor fitness thereby predisposes to cold injury.
- 5) Altitude greater than 8,000 feet decreases shivering and vasoconstriction response to cold.
- 6) Cessation of Exercise. Exercising, athletes produce heat by muscular activity and are at less risk for cold exposure injury. At the end of an event, or when exercise stops due to injury, heat is no longer being generated by exercise, but heat loss continues, and rapid cooling may result. Training alone, in remote places and at unusual hours, increases the length of exposure likely to occur before an injured athlete can be removed from the cold.

## Preventing Cold Injury

- 1) Risk and Event Management
  - a. Assess environmental heat loss risk: temperature, wind, rain, solar load, immersion, altitude. Be alert to changes



in these factors. Athletes can then be advised to modify clothing or seek shelter. And event managers can consider shortening, moving or cancelling an event. Wind chill temperature index (WCT) integrates temperature and wind to estimate cooling power. The WCT predicts the risk of frostbite to exposed facial skin in a person moving at walking speed. The wind effect of the athlete moving at higher speed (run, ski, bike, skate) is not considered in calculating WCT. The risk of frostbite in the extremities is not predicted by WCT.

- b. Assess athletes' risk factors: exercise demands, fitness, fatigue, health, body fat, hydration and nutritional status.
- c. Prepare appropriately: adequate training, clothing, water and food; scheduled clothing changes; provision of shelter and re-warming; planned monitoring of weather conditions and of athlete tolerance of the cold; and action plans to care for athletes, staff and spectators who are having difficulty staying warm.

2) **Clothing:** Exercise intensity and ambient temperature determine clothing (insulation) requirements during exercise. Hats are useful, as up to 50 percent of heat loss at rest is from the head. Layering is dressing with an inner layer that wicks perspiration to the outer layers for evaporation, a middle insulating layer that allows moisture transfer, and an outer layer, worn when necessary, to repel wind and rain but capable of transfer of perspiration to the air. Layering allows adjustment in insulation to prevent overheating and sweating, while remaining dry in wet conditions. Glove liners provide wicking and insulation for the hands. Mittens provide significantly more insulation than gloves. Clothing that constricts fingers or toes predisposes to peripheral cold injury. Wet clothing should be removed quickly and replaced, including socks and gloves.

3) **Food and Fluid Intake:** Exercise in cold environments increases energy expenditure and fluid loss. Insufficient carbohydrate reserves to maintain core temperature risks cold injury. Dehydration affects neither shivering nor vasoconstriction, but significant loss in circulating volume decreases perfusion. In cold as well as other temperatures, carbohydrate availability and dehydration are limiting factors in performance. Athletes can sustain exercise in cold by ingesting 6-12 percent carbohydrate beverages. Carbohydrate-rich foods are appropriate for prolonged exercise in the cold.

### Wind-Chill Chart

		ACTUAL THERMOMETER READING F											
		CALM	50	40	30	20	10	0	-10	-20	-30	-40	-50
ESTIMATED WIND SPEED MPH	5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	
	10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	
	15	36	22	9	-5	-18	-36	-45	-58	-72	-85	-99	
	20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	
	25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	
	30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	
	35	27	11	-4	-20	-35	-49	-67	-83	-98	-113	-129	
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132		
		LITTLE DANGER FOR PROPERLY CLOTHED PERSON					INCREASING DANGER			GREAT DANGER			

\*Wind speeds greater than 40 MPH have little additional effect

**DANGER FROM FREEZING OF EXPOSED FLESH**

### Field Treatment of Cold Injury

**Frostbite:** Seek shelter and insulation to maintain core temperature. Reverse vasoconstriction by re-warming. Re-warming is best accomplished with 1) body heat – the victim's or someone else's body heat (e.g., placing the cold hand into the axilla) or 2) warm water 104-109 degrees F (40-43 degrees C). Warmer water produces greater injury, swelling and tissue death. Once re-warming begins, avoid additional freezing. It is better to tolerate some additional time with frozen tissue during extrication from the cold than to re-warm and then suffer refreezing during extrication. Rubbing the injured



part tends to add mechanical damage to thermal damage, and is to be avoided.

**Hypothermia:** a) Conscious, hypothermic persons should have wet clothing removed and should be insulated with whatever warming material is available. If possible, evacuate to a warm building/car/shower. Encourage the drinking of large volumes of warm, sweet liquids to improve circulating volume and available energy for exercise. Encourage exercise to promote heat production by muscular activity. Such athletes usually respond to peripheral re-warming, but transport to medical care as a precaution against deterioration. b) Comatose, hypothermic athletes should be insulated and transported emergently. Field re-warming and field CPR are usually ineffective and only delay transport to a medical facility for rapid core re-warming and comprehensive care.

### Cold-induced Bronchoconstriction

Exercise-induced bronchoconstriction (EIB) is a transient narrowing of the airways that is provoked by exercise. Cold weather athletes have an increased prevalence of EIB: Twenty-three percent of Olympic winter athletes and 33-50 percent of cross country skiers. High intensity exercise, high ventilation rate and exercise in indoor rinks predisposes. The EIB with cold exposure is believed to be due

to a combination of breathing dry air and reflex response to facial cooling. Impaired air quality in indoor rinks is implicated as an additional factor.

### Cold Environment Modifies Trauma Protocols

The assessment and management of the injured athlete in a cold environment follows Basic Trauma Life Support protocols. Depending on the severity of the cold, the risk it represents to the injured athlete and to the rescuers, and the availability of warm shelter, evaluation and resuscitation may be delayed in order to extricate the athlete from the cold. Evacuation of the winter athlete from the scene of injury can be a challenge requiring special equipment, training and protocols, such as those developed by the National Ski Patrol.

As seasons change, extra beauty, exhilaration and challenge are brought to the excitement of athletic competition in the cold. Despite the serious risks of cold injury, thoughtful planning and preparation can ensure that safe outcomes accompany athletic success. ☉

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# 2016-2017 MPA SKI BULLETIN

(updated 11/21/16)

## SKI SEASON

November 28, 2016	First Practice
December 16, 2016	First Regular Season Meet (After 3 p.m.)
February 21-22, 2017	Class A Alpine – Mt. Abram
February 21-22, 2017	Class B Alpine – Black Mountain
February 23-24, 2017	Class A Nordic – Quarry Road
February 23-24, 2017	Class B Nordic – Sugarloaf Outdoor Center
February 23-24, 2017	Class C Nordic – Quarry Road
March 10, 2017	End of 2016-2017 Ski Sport Season

## TERMS AND CONDITIONS

The Terms and Conditions of this bulletin and the MPA Ski Rule Book shall govern all **regular season** and tournament competition.

## STATE CHAMPIONSHIP

A Team Champion will be recognized in each class in each event. Individual Skimeister champions will not be recognized.

## ENTRY FORMS

Copies of the Entry Form must be received at the MPA office, ALPINE AND NORDIC SITE, by the day specified for each class. All inquiries regarding the management of the meets are to be made to the appropriate Meet Coordinator.

## MEET INFORMATION

1. All championship skiing competitions shall be governed by the Maine Interscholastic Skiing Rules, as amended, and this bulletin. (Rules can be found on the MPA web site at [www.mpa.cc](http://www.mpa.cc).)
2. Based on the availability of venues at this year's championships, the scheduled this year is as follows:

### CLASS A

Tuesday, February 21, 2017

Boys' Giant Slalom  
Girls' Giant Slalom

Mt. Abram

Wednesday, February 22, 2017

Boys' Slalom  
Girls' Slalom

Mt. Abram

Thursday, February 23, 2017

Boys' Classical  
Girls' Classical

Quarry Road

Friday, February 24, 2017

Boys' Freestyle  
Girls' Freestyle

Quarry Road

**CLASS B**

Tuesday, February 21, 2017

Boys' Giant Slalom  
Girls' Giant Slalom

Black Mountain

Wednesday, February 22, 2017

Boys' Slalom  
Girls' Slalom

Black Mountain

Thursday, February 23, 2017

Boys' Classical  
Girls' Classical

Sugarloaf Outdoor Center

Friday, February 24, 2017

Boys' Freestyle  
Girls' Freestyle

Sugarloaf Outdoor Center

**CLASS C**

Thursday, February 23, 2017

Boys' Classical  
Girls' Classical

Quarry Road

Friday, February 24, 2017

Boys' Freestyle  
Girls' Freestyle

Quarry Road

ALL REGULATIONS AS DETERMINED BY THE MPA SKI COMMITTEE RELATED TO SAFETY AND SPORTSMANSHIP SHALL BE ENFORCED IN ALL REGULAR SEASON SKI MEETS INVOLVING MPA MEMBER SCHOOLS.

3. In order for a competitor to participate in the state meet, a competitor must have competed in a minimum of one event of the discipline he/she is entered. A medical appeal must be submitted to the committee chair two weeks in advance of the state meet.
4. An individual competitor from a school not sponsoring a ski team may be entered providing the entrant's school has established a cooperative team agreement with another school; he/she must participate on a daily basis with the cooperative team. Individual entrants must use the standard entry form and entry application which must include a coach who meets the MPA coaches' eligibility standards and accompanies the athlete to the meet.
5. No school team may be entered in the team competition unless the school has sponsored a school team which has competed in interscholastic meets during the current season.
6. Teams/skiers entered in the Giant Slalom and Slalom races are REQUIRED to wear undamaged hardshell helmets.
7. All coaches, including volunteers, must meet MPA Coaches' Eligibility Standards to be working with athletes at all MPA ski meets. \*Each coach must complete the NFHS "Concussion in Sport – What You Need to Know", "Heat Acclimatization", and the "Sudden Cardiac Arrest" videos that are available at the NFHS website ([www.nfhslearn.com](http://www.nfhslearn.com)).
8. Coaches meeting eligibility standards, parents, and athletes may wax skis at meets

### BONA FIDE TEAM RULE

A member of a school team is a student athlete who is regularly present for and actively participates in team practices and competitions. Bona fide members of a school team are prevented from missing high school practice or competition to compete or practice elsewhere.

- \* A single waiver per student athlete per sport season may be granted by the principal on a case-by-case basis for extraordinary circumstances. (e.g. If a student/athlete were invited to participate in a prestigious weekend event then a waiver may be granted. If a student/athlete were invited to participate in a nationally recognized tournament over a school vacation then **that** waiver may be granted for that activity. If a student requests to miss practice every Friday because he/she is receiving specialized coaching from an outside team/coach, then a waiver should not be granted **because it violates the spirit and intent of the rule.**)
- \*\* This policy is not intended to restrict dual sport participation in schools that allow dual participation.

\*\*\* Penalty for violation of this policy:

1<sup>st</sup> Violation Report violation to MPA office, suspension from play for one game/contest

2<sup>nd</sup> Violation Report violation to MPA office, removal from team for remainder of season

(Effective Date: 2011 Fall Sport Season)

**FEES**

Entry fees for the 2017 state meets will be \$375/team and \$125/individual. Each mountain may also charge a separate lift fee.

## ALPINE SKI CLASSIFICATION

<u>CLASS A</u> 500+	<u>CLASS B</u> 0-499
1. Thornton (1422)	1. Yarmouth (496)
2. Lewiston (1318)* (G)	2. Gray-NG (495)
3. Bangor (1169)*	3. John Bapst (470)
4. Bonny Eagle (1134)*	4. Spruce Mountain (465)
5. Oxford Hills (1072)	5. Caribou (442)
6. Scarborough (1034)	6. Mountain Valley (418)
7. Windham (1005)	7. Mattanawcook (348)
8. Edward Little (977)	8. Fort Kent (295)
9. Falmouth/Waynflete (970)	9. Telstar (236)
10. Gorham (838)	10. Winthrop (227)* (B)
11. Brunswick (821)*	11. Maranacook (421)
12. Skowhegan (775)	12. Mt. Abram (247)
13. Marshwood (739)	13. Lee (153)
14. Mt. Blue (696)	14. Central Aroostook (B) (124)
15. Hampden (691)	15. Wisdom (104)* (B)
16. Lawrence (674)* (B)	16. Greenville (67)
17. Kennebunk (673)	
18. Camden Hills (669)	
19. Greely (664)	
20. York (625)* (B)	
21. Leavitt (613)	
22. Fryeburg (559)	
23. Lake Region (524)	
24. Cape Elizabeth (555)	
25. Presque Isle (544)	
26. Freeport (511)	
27. ^^Cheverus (465)	
28. ^^Wells (449)* (B)	

## NORDIC SKI CLASSIFICATION

<u>CLASS A</u>	<u>CLASS B</u>	<u>CLASS C</u>
<u>600+</u>	<u>400-599</u>	<u>0-399</u>
1. Bangor (1169)* (B)	1. Morse (586)*	1. Orono (346)
2. Oxford Hills (1072)	2. Cape Elizabeth (555)	2. Dirigo (314)
3. Windham (1005)* (G)	3. Erskine (554)* (G)	3. Fort Kent (295)
4. Edward Little (977)	4. Presque Isle (544)	4. Waynflete (260)
5. Deering (927)	5. Freeport (511)	5. Telstar (236)
6. Portland (868)	6. Yarmouth (496)	6. Winthrop (227)* (B)
7. South Portland (846)* (B)	7. Gray-NG (495)	7. Monmouth (214)
8. Brunswick (821)* (G)	8. Spruce Mountain (465)	8. Boothbay (206)
9. Mt. Ararat (804)	9. Wells (449)* (G)	9. St. Dominic (197)* (G)
10. Falmouth (710)	10. Caribou (442)	10. Madawaska (164)
11. Mt. Blue (696)	11. Maranacook (421)	11. Fort Fairfield (144)
12. Camden Hills (669)	12. Mountain Valley (418)	12. Ashland (88)
13. Greely (664)	13. ^^Mt. Abram (247)	13. Maine Coast Waldorf (42)
14. York (625) (G)		14. MSSM (147)
15. Leavitt (613)		
16. ^^Fryeburg (559)		
17. ^^Cheverus (465)* (B)		

\*Denotes Individuals    ^^Applied to Higher Classification