New England Weather and you

Some guidelines for how to dress and prepare for it as a volunteer.

Here are a few thoughts on preparing for the possible weather during outdoor public service events, such as the Boston Marathon, Head of the Charles Regatta, etc. which do not fall into the predictable summer weather patterns. They are based on my experience leading and instructing various outdoor activities with the Appalachian Mtn. Club and other groups.

Stay up to date on the forecast, as New England weather patterns are volatile. As none of us has the connections to change the weather, the best we can do is be prepared for it.

Generally, the sponsors will go ahead with the event, unless the weather is a clear hazard to competitors, participants, volunteers and/or spectators. Lightning, extreme heat, and cold/wet conditions are the most likely to cause cancellation. The competitors have been training during all sorts of weather for many months, and the ones traveling to Boston are already committed. All of the logistics have been arranged; materials and supplies purchased, various service providers, vendors and so on, involving planning for many months prior to the event. The number of spectators will likely be affected much more by the weather than the number of competitors.

Volunteers are even more necessary when the weather is bad, as extreme weather will mean a greater need for first aid support.

The big concern with cold damp weather is **hypothermia** (lowering of the body's core temperature). Water, from perspiration or precipitation, dramatically increases heat loss to the point where the body cannot maintain its normal temperature. Immersion in cold water is even more so. Wind, often in the forecast, accelerates this process. It does not matter whether the water comes from perspiration, precipitation, or immersion.

Hypothermia is also a concern during cool dry weather, as the competitors are A) lightly dressed, B) have low body fat/less insulation, and C) have used up their body's energy reserves. The usual symptoms of hypothermia, such as shivering, may be absent or obscured. Once they stop moving and generating heat, hypothermia can set in rapidly.

With some weather forecasts, hypothermia is also a concern for spectators and volunteers.

We cannot be of any help to others, if we need help ourselves.

A few suggestions:

- 1) Cotton is a poor/dangerous choice for insulation in wet or damp conditions. It holds moisture against your skin, where it increases your heat loss significantly. Much better material choices include synthetics such as polyester fleece or wool.
- 2) Dress in layers. This allows flexibility for varying weather, and for varying levels of exertion. As volunteers will be standing for much of the time, they will generate little heat from movement, and should have more layers than someone who is active.
- 3) A system commonly used by hikers and other outdoors people is to have a first layer against the skin of synthetic long underwear (often called "polypro" but is now usually various forms of polyester).
- 4) Over that, you will have various layers of insulation made of synthetic fleece, pile, fiberfill, or wool. Vest layers may be helpful, and it is always more versatile to have something that

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opens in front, rather than a pullover style. Bring extra layers in a plastic bag, in case you get soaked.

- 5) On the outside, you will want a shell layer, which protects you and your insulation from wind and from precipitation. While the Boston Marathon windbreakers stop wind well, they are no more than water repellant. You may want to supplement with a waterproof layer. A waterproof/breathable material such as Gore-Tex[™] is a good choice, but more expensive than basic coated nylon.
- 6) Besides dressing your body, you also want to make sure you protect your head, hands and feet. A warm hat, as well as a rain hat, will be helpful. Gloves for your hands (with spares) and synthetic or wool socks inside shoes or boots which can handle the water will round out your protection from the weather.
- 7) For those stationed in boats or on docks, consider that if you end up in the water, you will need to be able to quickly shed layers and footwear if they interfere with swimming. A light wetsuit underneath, such as used by whitewater paddlers or windsurfers, would be a good choice. Also, consider wetsuit booties on your feet. Clothing should work under a lifejacket. You may want to bring your own lifejacket to be sure it fits you well. A paddling style jacket is best for being active.
- 8) Once you have taken care of protecting yourself, also consider how to protect your radio and other gear. There are many waterproof cases available for different gear in different situations. A wet radio can not only be expensive to repair or replace, but end up being useless for the day.
- 9) Also keep in mind that your body needs fuel and water to keep warm. Make sure you have sufficient snacks with you, and nibble throughout the day to fuel your internal furnace. Carbohydrates are a good choice for quick energy, while eating a good breakfast will give you a good foundation for the day.

It also is important to keep properly hydrated, even if you are not sweating, so make sure you bring a <u>filled</u> water bottle. At least 2 quarts or liters to start with, more if very warm. While many stations have food and water nearby, not all of them do.

10) The optimists out there will be interested in this part: In warm sunny weather, there are different concerns. First is the sun. You should have eye protection, such as sunglasses, visor or a brimmed hat (I recommend <u>not</u> wearing a hat with the NY Yankees logo on it). Also, for exposed skin, you should either wear lightweight long-sleeved clothing, or a sunscreen lotion with a reasonable SPF. To keep your body cool, drink plenty of water throughout the day. Frequent sips of water are better than drinking a lot at once, infrequently.

Further information is available from any outdoor specialty shop or outdoors club.

I hope this is helpful to the hams and other volunteers for the Boston-area public service events throughout the year.

First aid volunteers should get additional information or training related to weather extremes, both hot and cold, and may need additional first aid gear.

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