

## Cold Weather Running

As the winter season is upon us runners are faced with new challenges in order to maintain their running schedules and workouts. We are subjected to declining daylight and dropping temperatures which make our routines more challenging, but not impossible. Here are a few things to consider preparing for running through the winter season:



**Clothing:** Wear appropriate clothing for the reduced temperatures. A significant amount of heat is lost through our heads, hands and feet. Using hats and gloves can make a huge difference. Avoid clothing that causes significant sweating such as cotton. Cotton will draw heat away from the body. Instead consider wearing a microfiber shirt as a first layer followed by a breathable windbreaker. These fabrics include Polypropylene, wool, wool/synthetic blends, and treated polyesters like Capilene. The fabric closest to your body should wick moisture away from your skin. **Avoid overdressing!** You're going to warm up once you get moving, so you should feel a little bit chilly when you start your run. If you're warm and comfortable when you first start, you're going to start sweating very early in your run.

A good rule of thumb: Dress as if its 20 degrees warmer outside than it really is. Consider wearing multiple layers so that as you get warmer and sweat you can remove layers. The best type of windbreakers are Gortex or Nylon.

**Temperature:** There is no reason to avoid cold temperatures if you have the right clothing. If the temperature is below freezing make sure to cover any exposed skin to avoid potential frostbite. This is especially important if it is windy and can penetrate your clothing. Consider running into the wind first as this can reduce sweating. Running into the wind at the end of your run will only enhance your chill once you have started sweating. Frostbite is always a concern when the temperature is very low. Be aware of any open skin areas. Skin that becomes numb, waxy and white indicate the first stages of frostbite. Wear a hat and gloves in very cold weather

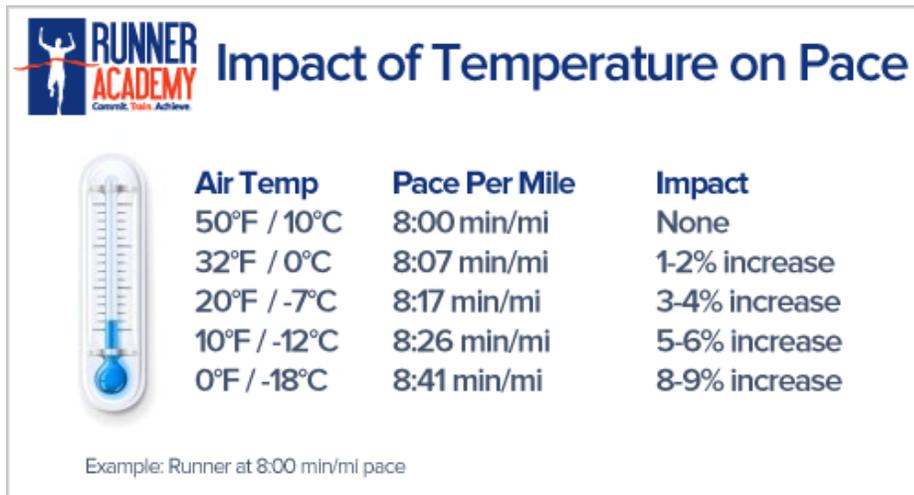
as nearly 20-40 % of heat is lost thru the head, hands and feet. This will help to keep the rest of the body warm. As with anything be smart, if temperatures are dipping below -20 degrees consider staying inside for your work out.

**Terrain:** It is often more treacherous in the winter due the fact that our normal running paths may be unplowed, slippery or considerably uneven. Consider where you run and try to avoid getting your feet wet. You may want to map out several courses so you have options when the weather is uncooperative. There are several shoe adaptations such as spikes that can help you find traction in snowy or icy terrain if you are committed to running in the outdoors.

For running on ice and snow, consider a slip-on traction device for your running shoes, like Yaktrax RUN (\$40; [yaktrax.com](http://yaktrax.com)) or Kahtoola NANOspikes (\$50; [kahtoola.com](http://kahtoola.com)), which make each step more sure-footed. ([shape.com](http://shape.com))

**Warm Up:** Start by doing some stretching indoors or walking/biking if available. It will take you 5-10 minutes to warm up in real cold weather so prepare your muscles early. Alternatively, you can perform some light exercises such as squats and lunges, burpees, mountain climbers, kickbacks, leg swings forward and lateral, clamshells etc all of which are designed to incorporate movement and increase circulation thru the body in preparation for running. This will help to raise your core temperate and help you feel warmer going out into the cold.

**Expectations and Running Style:** Winter running is not the best time of year to try to run your fastest time. Your body needs time to warm up so allow yourself to start at a slower pace. You will find it easier to maintain your regular pace once you get warmed up and there is less fatigue in cold weather than when temperatures are hot and humid. It is much harder to run with a long stride in wintry conditions. Keep to shorter quick strides. Keeping your feet underneath you versus a long heel strike will help you maintain stability in slippery conditions and icy terrain. In short enjoy the run and minimize your concerns about pace. See the below table on how cold weather impacts pace.



**Hydration:** is very important even in cold weather. The extra layers will cause you to sweat more and work harder. While you may not feel thirsty or sweaty, your body is still losing water as you breathe, so stay hydrated.



## Hydration While Running

For runs up to 5-7 miles or 90 min, whichever comes first.

**Slower than 8:00 min per mile pace**  
4 - 6 oz of water every 20 minutes

**Faster than 8:00 min per mile pace**  
6 - 8 oz of water every 20 minutes

Runs longer than 5-7 miles or 90 minutes in duration should also include a sports drink with sodium and electrolytes for fluid replacement.



### **Breathing**

The cold air can affect how well we breathe – especially for those who may experience some exercise induced asthma. The idea that cold air is bad for you lungs is largely unfounded but many experience pain or stinging in their lungs when exercising in the cold.

Much of the time this is due to dry air being inhaled rather than cold air. You might try inhaling through your nose as much as possible or purchasing a running mask or balaclava to help warm and moisten the air before you inhale it. In addition facial protection can help to reduce impact of facial cooling which has been linked as a contributing factor for increased bronchospasm due to influence on the vagus nerve.

### **Cool Down**

Finishing your run in the cold weather is different than running in warm, hot weather. It is easy to develop a chill after being out in the cold. Consider a warm shower after your run and make sure you have a change of clothing. It is important to allow you body to regain its warmth. You can work on post run stretching after you have regained a good homeostasis.

Article presented by

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### **Shoe wear considerations:**

<http://www.runnersworld.com/article/0,7120,s6-240-319--4615-0,00.html>

[http://www.marathontraining.com/articles/art\\_crbr\\_jan17.htm](http://www.marathontraining.com/articles/art_crbr_jan17.htm)

### **Apparel considerations:**

[http://nikerunning.nike.com/nikeplus/?ref=running\\_global\\_redirect](http://nikerunning.nike.com/nikeplus/?ref=running_global_redirect)

**Cold weather running tips:**

Runners world <http://www.runnersworld.com/cold-weather-running/winter->

Runners academy <http://runneracademy.com/running-in-cold-weather/>