



### Face Masks In The Winter

We will wear face masks on course when social distancing is not possible. Realistically, there will be plenty of times when you will need to be close to your teammates during expedition travel, including lifting packs, managing sled dogs and cooking around the fire. Having an effective face mask for these situations is paramount.

Traditional fleece neck gaiters are very breathable, but breathability means that respiratory droplets can pass through easily, creating a very false sense of protection.

With these two challenges to risk mitigation, here's the scoop on face masks for winter courses.

#### Mask Criteria

1. All masks should be at least 2 layers. If you have a thin synthetic/polyester buff, make sure there is enough fabric that you can fold it over to create a face mask with 2 layers of fabric.
2. Test Them:
  - a. Make sure you can't see daylight when you hold the mask up to a lightbulb.
  - b. Try to blow out a birthday candle. If the mask doesn't pass these two tests, it's a flunky in the pandemic wardrobe. More details [here](#).

**Cotton Face Masks:** 2 or 3-layers of fabric are a solid choice for many non-aerobic situations. It is likely what you've been using one since the pandemic hatched. They have the filtration protection to mitigate a chunk of aerosols; however, it gets tricky from there. Cotton is best for non-medical masks, as the fibers trap particles well, but trapped moisture quickly turns into a frozen mask, rendering it ineffective. It is hard to breathe through an ice cube. They will need to be dried out thoroughly at the end of the day.

#### Staff Picks:

[Outdoor Research Essential Face Mask Kit](#): comes with filter inserts for added protection. Instructors like these for the warmth they provide along with comfortable fit.

**Synthetic or Merino Wool Neck Gaiters:** Designed to keep your neck and face warm in the cold and during the rigors of expedition travel. These will breathe well when you are active or the weather is chilly, but **do not** offer respiratory protection from viruses. With the coronavirus measuring 0.06-0.14 microns, fleece or merino wool neck gaiters typically are too porous to offer much in the way of virus protection. These coverings will help prevent you from touching your face and perhaps remind you about hygiene. Nonetheless, these are the warm fuzzy accessories to grab when the mercury dives or the winter wind picks up. Merino wool typically performs better than fleece as a neck gaiter. Fleece may be more economical, but tends to ice



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up faster in sub-zero conditions. Both will dry quickly in the evening. Look for 2-ply gaiters, or consider layering two gaiters together for better aerosol protection.

### **Staff Picks:**

[Smartwool Merino 250 Neck Gaiter](#): Choose a color you can identify easily and find inside your pack.

As we round the corner into winter, several companies are responding to the novel needs of the pandemic. We have hunted for the best compromise between breathability, filtration and warmth. It's a tall order. Here are some options:

- [Outdoor Research Adrenaline Sports Face Mask Kit](#)
- [RBH Designs Ag Mask](#)
- [Seirus EVO ARC Dynamax Dana](#)
- [Under Armour Sportsmask Fleece Gaiter](#)

### **Related Articles**

- [CDC: How to Select, Wear and Clean Your Mask](#)
- [Cold Humid conditions and respiratory droplets](#)
- [Ranking Effective Filtration in DIY Mask](#) – scroll down to mask material filtration chart
- [How to Do the Barrier Efficacy Test: Blowing Out A Candle, with thermal imaging maps](#)