

# Cold-Weather Photography: How to (Safely!) Take Photos in the Cold

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11-14 minutes



Icy temperatures certainly make for amazing photos. You can capture sparkling snow, stunning frost, white-capped mountains, frozen lakes, and so much more – assuming your gear can handle the cold, that is.

Unfortunately, most cameras, lenses, and accessories aren't optimized for freezing temperatures. And if you're not careful, cold-weather photoshoots will cause an array of problems, from moisture-covered lenses to dead batteries in the field and even hypothermia.

It's not all bad news, though. Yes, capturing photos in the cold is a challenge. But if you put in the effort and take the proper precautions, you can photograph some of the most *beautiful* conditions on the planet.

So how can you *safely* do cold-weather photography? That's what I address in this article. I discuss:

- How to protect your cameras and lenses from condensation and freezing
- How to prevent hypothermia when out shooting (including essential gear recommendations)
- How to keep your camera working *long* after other photographers have called it quits
- Much more!

Ready to embark on some breathtaking photoshoots this winter? Let's dive right in.

## **1. Wear the right clothes for the cold**

Want to stay safe while doing cold-weather photography? Then you've got to dress the part.

It doesn't matter whether the light is beautiful and the scenery is jaw-droppingly gorgeous; if you're shaking so hard you can't operate the camera, you won't get the shot (and you may get a trip to the hospital).

So what should you wear? The specifics depend on the weather, but I'm a big proponent of layers. When dressed in your winter-photo clothing, you should feel a bit like an onion, especially if you're heading out into sub-zero conditions. I'd recommend donning long underwear, a fleece or wool sweater and pants, a down or synthetic vest, a jacket with a hood, windproof pants, two pairs of thick wool socks topped by expedition-quality winter boots, a cold-weather hat (I'm partial to a musher's-style hat complete with ear flaps), and a balaclava or face mask.

Here are two of my clients on a photo tour, properly dressed for the weather:

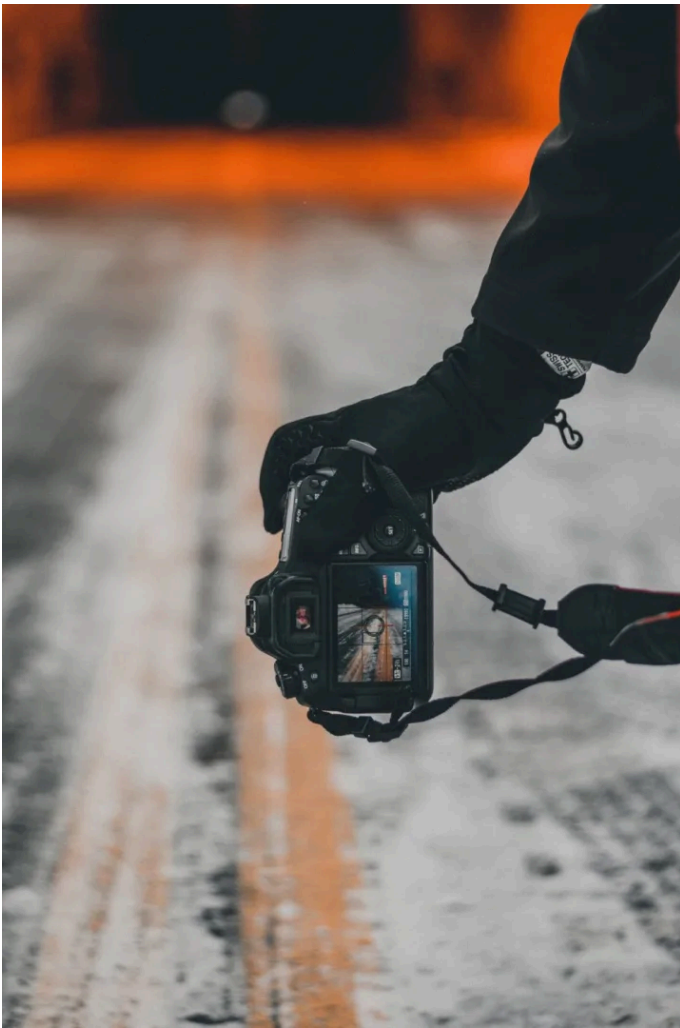


It may not be fashionable, but it's safe, and that's what counts.

Now, depending on your location, the list of clothing I shared above might be overkill. I live in Alaska, where temperatures drop to -40 Fahrenheit. If your winter temperatures tend to hover around 20-40 Fahrenheit, then you can dial back the number of layers, and you can potentially do away with the balaclava and windproof pants – though it's always good to have them at home (you never know what each new winter will bring!), and it's always better to overdress than to underdress.

Regardless, make sure you wear a warm hat, an insulated jacket, and good boots – no matter your location.

## **2. Wear two pairs of gloves**



Most photographers hate gloves. After all, gloves act as a barrier between your fingers and those tiny little camera buttons, so they significantly slow down your photography. (Gloves can also prevent touchscreen operation, which is a major problem when using touchscreen-reliant cameras.)

But while gloves are an inconvenience, they're a cold-weather photography *necessity*. Without gloves, your hands will go numb (or worse!) in minutes, and you'll be out of action before you can take a single shot.

Fortunately, not all gloves are equally frustrating. I'd recommend purchasing two glove pairs that can be worn simultaneously: one set of thin gloves that you can use to operate your camera, and one set of thicker gloves or mittens that you can add when walking from location to location or when waiting for the right light.

Some manufacturers design gloves specifically for photographers, but you can also look into products designed for ice fishing; regardless, see if you can find a nice pair of inner gloves that are touchscreen-sensitive, as well as a warm pair of outer mittens or thick gloves with removable fingertips. Remember, while you want to keep your hands as warm

as possible, you don't want to purchase gloves that are so bulky you can't operate your camera!

### 3. Carry (reusable) hand warmers

Gloves do a great job of keeping your fingers warm, but if you plan to be out for long hours in ultra-cold weather, I'd encourage you to carry a few packs of hand warmers.

For one, hand warmers can help you "recharge" your fingers when the cold is brutal; they're also great to have around in case your gloves are just too thin to handle the temperatures.

Disposable hand warmers only cost a few dollars, but I highly recommend reusable hand warmers. You can use the warmers as needed, then – when you get home – stick them in a pot of boiling water. Within a few minutes, they'll be as good as new, ready for your next adventure!

### 4. Pay attention to your batteries

A cold battery won't work as well as a warm battery – so on a cold day, your camera and flash batteries will last only a small fraction of the time they would at room temperature.

To prevent any problems, here's what you should do:

1. Make sure your batteries are *completely* charged before heading out to shoot. Each battery should be fully powered and ready to go because every drop of electricity *counts*.
2. Carry as many spare batteries as possible. You can buy extra batteries from all the standard photography retailers (though make sure they're compatible with your specific camera model!). You might also consider purchasing third-party batteries, but be careful; some are far more reliable than others.
3. Keep all your spare batteries inside your jacket. That way, they stay as warm (and charged) as possible. You can even put *dead* batteries back into your camera after time in a warm pocket, and they'll let you shoot for another handful of minutes. I find I can photograph at extremely cold temperatures for the better part of a day by cycling two batteries back and forth from my pocket to my camera, though the specifics will vary depending on your camera's power requirements. (Note: Modern [mirrorless cameras](#) offer very poor battery life, so you'll likely need 4+ batteries to last a day of shooting in frigid temperatures!)



## 5. Don't breathe near your lens

Have you ever tried breathing on your lens in the extreme cold? *It's a bad idea.* Here's what'll happen:



You see, when you breathe, the warm, humid air will cause condensation on your lens, resulting in a layer of milky frost on the glass. It doesn't matter how much money you spend on your equipment; *no* amount of sharpness will make up for that damage, and your lens will be out of commission for the rest of the day. Wiping at the frost usually just smudges it more, and defrosting the lens can take hours.

Bottom line: Watch where you breathe. If you turn your camera around to check the lens settings, don't exhale. And if you're standing in front of your camera, make sure you don't let out a badly aimed breath.



I'd also recommend wearing a neck gaiter or balaclava; when this is pulled up over your mouth and nose, your breath will be directed upward, where it'll frost on your eyelashes instead of your camera. (Make sure you also wipe away moisture on the [viewfinder](#), which can be a major cold-weather photography problem!)

## **6. Use your lens cap**



While foggy lenses are often caused by breath or sudden changes in temperature, when shooting at night, there's always the chance that natural frost will form.

To avoid this, snap on your lens cap when you aren't shooting. Get in the habit of using that lens cap whenever you're taking a break, searching for a new [composition](#), or walking from one location to another.

Personally, when I'm out photographing at night, I put my cap on my lens, even if I'm just walking a short distance to a new shooting location.

I'd also recommend using a clear filter on the front of your lens. That way, if you do end up with lens frost and it gets scraped or smudged, you don't need to worry about damaging the lens's front element. It's easier (and far less expensive) to replace a filter than a lens!

## **7. Carry a rocket blower to clean away snow**

If you try to [shoot in heavy snow](#), especially if the wind is strong, you'll run into a problem:

The flakes will land on the front of your lens, and – if left unchecked – they'll cause significant blur.



Now, your first line of defense should be a lens hood, but even a large hood won't keep out the snow forever, which is why I recommend carrying a rocket blower. That way, when the snow starts to pile up, you can periodically give your front lens element a clean.

(Why a rocket blower and not a cloth? A cloth causes smearing and smudging, which can make the problem even worse, whereas a rocket blower will push away those snowflakes without causing any damage.)

One tip: Make sure you regularly check for snow. Don't wait until you can see signs of blur in your camera's viewfinder; by then, the snow may have been affecting your photos for some time!

## **8. Seal your gear before going inside**

Did you know that a rapid transition from a cold environment to a hot environment can cause condensation on glass? It's why eyeglasses tend to get misty when coming in from the cold, and why, on a hot day, a cold beer glass gathers condensation.

For lenses, this can be extremely problematic. A cold lens brought directly inside [will fog up](#), so you won't be able to use it for any indoor photos – and the excess moisture can lead to smears, smudges, and potentially even fungus on the lens elements.

Fortunately, there's a way to prevent this. Put your camera gear in a sealed airtight compartment – such as a simple ziplock bag – before heading inside. Then let it adjust to

the warmer temperatures for a few hours. (An alternative is to leave your lens in a padded camera backpack or bag, though this isn't quite as effective as an airtight bag.)

Then, when you finally do expose your gear to the indoor air, it'll stay free of condensation!



Check out my bagged-and-sealed camera, ready to be taken back indoors after a cold outdoor shoot.

Pro tip: While ziplock bags work great for sealing up your gear, I prefer lightweight roll-top dry bags like those used by boaters. They're tough, reusable, and work like a charm!

## **Cold-weather photography: final words**



The cold scares a lot of photographers, and rightly so. But with a few precautions – such as bringing warm clothes, charging spare batteries, avoiding frost, and protecting against condensation – you can keep your gear safe, *and* you can capture plenty of beautiful photos along the way!

Now over to you:

*How do you like to shoot in the cold? Do you have any additional cold-weather photo tips that we missed? Share your thoughts in the comments below!*

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is a professional writer, photographer, and workshop leader based in Fairbanks, Alaska. His images and writing on photography, natural history, and science have appeared in hundreds of articles in more than 50 publications around the globe. Dave offers multi-day summer and winter photography workshops in Alaska and abroad. He is currently accepting sign ups for affordable photo workshops in Alaska, Africa, and South America. Find out more [HERE](#) .

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