

What's Your Winter Wardrobe IQ?

Frostbite is Not Cool

Frostbite occurs when skin is exposed to severe and/or prolonged cold. But what is frostbite?

Definition: Frostbite happens when skin and fluids in the body tissues freeze and crystallize. This can cause damage to the blood vessels and result in blood clotting and lack of oxygen to the affected areas. A person with frostbite may also be subject to hypothermia.

Areas most affected by frostbite: hands, feet, ears, nose and face, in that order.

Staying warm AND dry are critical to avoiding frostbite.

Other variables include:

- length of exposure
- temperature
- wind chill factor
- humidity
- wet clothes, shoes, hair
- intake of alcohol, nicotine or drugs
- high altitudes



Hats

Up to 60 percent of body heat can escape from an uncovered head. Hats come in all shapes and sizes to fit your particular style, so there's no excuse not to wear something.

Eyewear

Glasses have the added benefit of protecting your eyes from wind. Sunglasses add UV protection and reduce the reflective effects of snow.

Face & Neck

Scarves and neckware do two things: 1) protect the body from cold air and 2) keep body heat from escaping. Look for densely woven materials or layer.

Coats/Jackets

Coats and jackets are a personal choice. Just make sure your choice is appropriate for the temperature outside. Down provides excellent insulation until it gets wet. Layering can also provide good insulation, providing flexibility once you get indoors.

The basics of layering

Proper outerwear keeps you warm but also allows perspiration to evaporate. Have a **'wicking' layer**, such as thermal, close to the body that pulls away perspiration. A **second layer for insulation** such as sweaters, sweatshirts or pullovers will help trap body heat in. Fleece and wool maintain heat while wicking away moisture (cotton retains moisture). Top those with your **outer or 'protective' layer**.

Hand coverage

Hands are the most exposed skin with the least blood flow, which makes them most susceptible to frostbite. Best bets for hands are mittens or gloves made of waterproof, breathable fabrics (mittens are warmer than gloves). Allow space at the tips of the fingers to add insulation. Make sure your gloves tuck into your sleeve to trap heat.

Legs

Jeans are not waterproof and actually will keep wet moisture next to your skin. Leggings add only modest protection, so make sure you have additional layers such a long coat and tall boots. For more warmth, layer long underwear under pants.

Footwear

Insulated boots are recommended ideally, but any footwear that keeps your feet warm and dry is key. Wool or fleece socks will provide wicking and natural insulation. Be careful not to have shoes or socks that are so tight that they cut off circulation.

WindChill & Frostbite

by the numbers

The chart below shows how long it takes for frostbite to set in, based on windchill.

Temperature (F°)

Wind (MPH)	15	10	15	0	-5	-10	-15	-20	-25	-30	-35
5	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52
10	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59
15	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64
20	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-67
25	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71
30	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-74
35	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76
40	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78
45	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79

more than 30 min. 30 min. 10 min. 5 min.

Courtesy of the National Weather Service. To access their windchill calculator:

<https://www.wpc.ncep.noaa.gov/html/windchill.shtml>

