



Exercise and Cold Weather: Tips to Stay Safe Outdoors

Stay safe during cold weather exercise:

Almost everyone can exercise safely during cold weather. But if you have certain conditions, such as asthma, heart problems or Raynaud's disease, check with your doctor before you work out in cold weather. Your doctor can review any special precautions you need based on your condition, or medications you might take. The following tips can help you stay safe – and warm – while working out in the cold.

1. **Dress in layers:** One of the biggest mistakes you can make while exercising in cold weather is to dress too warmly. Exercise generates a considerable amount of heat – enough to make you feel like it's much warmer than it really is. The solution is to dress in layers that you can remove as soon as you start to sweat and then put back on as needed.

Your first layer should be thin like polypropylene, which draws sweat away from your body. Avoid cotton because it stays wet next to your skin. Your second layer should be fleece or wool for insulation. Then top off your outfit with a waterproof, breathable third layer. Avoid a heavy down jacket or vest since it may cause you to overheat if you're exercising hard.

You'll do some experimenting before you find the perfect combination that works for you based on your exercise intensity.

2. **Protect your hands, feet and ears:** When it's cold, blood flow is concentrated on your body's core, leaving your hands and feet vulnerable to frostbite. Try wearing a thin pair of gloves under a pair of heavier gloves or mittens lined with wool or fleece. Remove the extra layer of mittens and gloves when your hands begin to sweat.

Also consider buying exercise shoes a half-size or one size larger than usual to allow for thick thermal socks or an extra pair of regular socks. And don't forget a hat or headband to protect your ears, which are also vulnerable to frostbite.

3. **Pay attention to weather conditions and wind chill:** Exercising when it's cold and rainy can make you vulnerable to the cold. If you get wet, you may not be able to keep your core body temperature high enough. If it's extremely cold, you may need to exercise indoors or skip it for a day or two.

Wind chill extremes can make exercising outdoors unsafe even if you dress appropriately. The wind can penetrate through clothing and remove the insulating layer or warm air that surrounds your body. Any exposed skin is vulnerable to frostbite.

According to the Mayo Clinic, if the temperature dips below 0 °F, choose an indoor activity or take extra precautions if you choose to exercise outdoors.

Please refer to the [National Weather Service chart](#) below for a deeper look into wind chill and frostbite times.

		Temperature (°F)																	
Calm		40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97	
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98	
Frostbite Times		30 minutes			10 minutes			5 minutes											
Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V ^{0.16}) + 0.4275T(V ^{0.16})																			
Where, T= Air Temperature (°F) V= Wind Speed (mph)																			
Effective 11/01/01																			

- Choose appropriate gear:** If it's dark when you exercise outside, wear reflective clothing. To stay steady on your feet, choose footwear with enough traction to prevent falls, especially if it's icy or snowy. Wear a helmet while skiing, snowboarding and snowmobiling. Consider using chemical heat packs to warm up your hands or feet.