



Sun protection at the snow

Visitors to the snow are at increased risk of overexposure to the sun's ultraviolet (UV) radiation due to a combination of high altitudes and reflection of UV off the snow.

Why is UV a risk at the snow?

UV levels can be more intense at the snow because the atmosphere is thinner at higher altitude and absorbs less UV radiation. UV radiation intensity increases by about 10–12% for every 1000 metre increase in altitude.^{1,2}

Snow is also highly reflective. On a sunny day, clean fresh snow can reflect up to 90% of UV radiation.³ This means that you can be exposed to almost a double dose of UV – directly from the sun and reflected off snow-covered surfaces.

Think UV not heat!

Don't be fooled by the icy weather. It's the sun's UV radiation, not heat, that can cause sunburn, skin and eye damage and skin cancer. UV cannot be seen or felt and can damage your skin and eyes on cool or cloudy days.

Snow gear should cover most of your body, as it is designed to keep you warm, but you will need to protect your eyes and any exposed skin. To reduce your UV exposure, take breaks in the shade – especially in the middle of the day when UV levels are most intense.

Slop on SPF30 (or higher) broad-spectrum, water-resistant sunscreen

Apply a generous amount of sunscreen to all exposed areas of skin 20 minutes before going outside and re-apply every two hours. Make sure you apply sunscreen under your chin, beneath the tip of your nose and behind your ears.

It's a good idea to carry a small tube of sunscreen and SPF lip balm in your jacket pocket for re-application during the day.

Slide on goggles or wrap-around sunglasses

Make sure your eye protection meets Australian Standard AS:1067. If you wear prescription glasses, talk to your optometrist about getting prescription lenses fitted in your goggles or sunglasses.

Eye protection can also help to prevent snow blindness (also known as photokeratitis), which is caused when UV levels damage the outer cells of the eyeball. Snow blindness results in temporary loss of vision and can lead to chronic eye conditions in severe cases.

What about windburn?

While wind can dry and irritate the skin, there is no such thing as windburn. The red, stinging and peeling people associate with the wind is actually a result of the sun's UV.

More information and resources

For more information, visit sunsmart.com.au or contact Cancer Council on 13 11 20.

For more information about how to protect your skin, visit sunsmart.com.au/protect-your-skin

Certain health conditions and medications mean some people are more sensitive to UV radiation and always need to use sun protection regardless of the UV levels. For more information, visit sunsmart.com.au/skin-cancer/risk-factors-for-skin-cancer .

References

1. Global Solar UV Index: A Practical Guide. A joint recommendation of the World Health Organization, World Meteorological Organization, United Nations Environment Programme, and the International Commission on Non-Ionizing Radiation Protection, World Health Organization, Geneva, Switzerland, 2002
2. International Agency for Research on Cancer. IARC monographs - 100D. Solar and UV radiation. Lyon, France: International Agency for Research on Cancer, 2012.
- 3 Henderson S, Javorniczky J, Gies P. Spectral measurements of solar UV at several altitudes under Australian conditions. *UV Radiation and its Effects*, NIWA Research Workshop Queenstown, New Zealand. 2010.

Last updated: July 2022