

UVR Protection on the Snow

Why be SunSmart at the snow?

A bad case of sunburn will ruin anyone's weekend or holiday at the snow. What many alpine visitors don't realise is that it is still possible to get burnt while at the snow, even though conditions may be cold.

The risk of sunburn (or skin damage) is much greater in alpine regions than at sea level due to the thinner atmosphere and cleaner air which are not as effective at filtering out the sun's dangerous UV radiation. People may also develop a false sense of protection due to the cooler climate experienced in alpine areas and hence not adopt appropriate sun protection behaviour.

Ultraviolet radiation levels increase by 10-12% with every 1000 meter increase in altitude. This means that at an altitude of say 2,000 metres (eg. Thredbo Village is 1,370m, Mt Perisher is 2,054 and Mt Kosciusko is 2,228m) UV levels can be as much as 15-30 per cent higher than at sea level. (Canberra is 605 meters above sea level).

Snow is also very reflective and can reflect as much as 80% of UV radiation reaching its surface. So UV rays are not just reaching your skin directly but also indirectly as it is reflected and scattered off the snow and burns those exposed areas of the skin like under your chin, face and nose. UV radiation (up to 90%) can penetrate light cloud cover.

While sunburn is initially painful and uncomfortable it can also cause long term skin damage such as wrinkling, blotchiness and premature ageing. Over-exposure to UV radiation also causes skin cancer and short and long term eye damage and so it is important to take precautions when outdoors whether it be at the beach or at the snow. The more your skin is exposed to UV radiation the greater your risk of developing skin cancer.

Protect your skin

Most ski gear is already designed to cover your body to primarily keep it warm, the important issue here is to not forget about those other bits that may not have any protection from cover. Ie ears, neck and nose etc

A few simple tips to minimise your risk of skin damage at the snow include:

- Don't overdo it during the middle of the day. Plan indoor breaks or shade yourself from the sun during this time of the day
- Keep your head covered with a balaclava or a beanie with flaps to cover your ears
- Apply a generous quantity of water-resistant broad-spectrum SPF 30+ sunscreen to those exposed parts 20 minutes before you go out onto the snow. Parts should include your hands (if you not wearing gloves), neck, face, ears and under your chin. Applying sunscreen before going outdoors will give your skin time to absorb the cream. Remember to carry a small tube of sunscreen in a pocket or bumbag, so you can reapply regularly- say every 2 hours.
- In the cold alpine conditions it is common for lips to become dry, cracked and sunburnt. To avoid lip damage from UV rays, use an SPF 30+ lip balm and reapply regularly.
- During Spring skiing UV levels will be on the increase plus you may experience more warmer sunny days. Be sure to take extra care during this period.
- Many people confuse sunburn with windburn. Windburn occurs when strong winds strip the skin's natural oils. Whilst windburn skin may feel red and irritated, much like the effects of sunburn, windburn does not cause long term skin damage which can lead to skin cancer. The moisturisers in sunscreen can help relieve the effects of windburn.

Protect your eyes

Snow blindness-or sunburn on the surface of the eye is a real risk at the snow. The condition is usually temporary and may only last a few days, but it can be very painful and can contribute to long-term eye damage, such as cataracts.

To protect your eyes from glare and UV radiation:

- Wear wrap-around close fitting goggles or sunglasses. Make sure they meet Australian Standard 1067
- If you wear prescription glasses, talk to your optometrist about prescription lenses fitted in your sunglasses or goggles. Alternatively you may chose to wear a good fitting set of 'fitover' sunglasses.

Protecting children at the snow

Research suggests that over-exposure to the sun's UV radiation during the first 15 years of life can greatly increase a child's risk of developing skin cancer later in life including melanoma. It is vital that young kids protect their skin whilst at the snow.

- Apply SPF 30+, broad-spectrum, water-resistant sunscreen liberally to exposed areas 20 minutes before going outside. Give your children small tubes of sunscreen and lip balm so they can reapply throughout the day, every 2 hours.
- Ensure children's eyes are well protected by good quality goggles or glasses. For safety, children's eyewear should have plastic (not glass) lenses. Eyewear for children and teenagers should meet the Australian Standard AS 1067. Toy and/or fashion eyewear (Category 0 and 1) will not provide suitable protection against UVR and should be avoided. Look for sunglasses that are categorised 2 and above. These sunglasses will absorb more than 95% of UV radiation. Sunglasses which are marked eye protection factor (EPF) 9 or 10 exceed the Australian Standard and transmit almost no UV radiation.
- Certain sunglasses and goggles have "polarized lenses"- these should be seen as an added bonus as they will reduce glare which is important around reflective surfaces such as snow as it will increase your visibility. However they do not offer added protection against UV radiation.
- If the weather is warming up be sure your children continue to wear long sleeves and high necklines - a closely woven fabric will offer best protection against UV radiation. Headwear should protect the face, neck and ears. Take particular care during the middle of the day.
- And finally, parents are encouraged to act as positive role models. Actions speak louder than words plus increased sun protection against sun exposure can prevent skin cancer at whatever age it is applied.

Further Information

For more information on sun protection view our other Information Sheets or contact **Cancer Council Helpline on 13 11 20**
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