

Sun protection

CATEGORY:

Treatments

WHAT:

Strategies to shield the skin from the damaging effects of solar ultraviolet (UV) radiation

WHY:

To prevent / reduce:

- Sunburn
- Skin ageing
- Skin cancer
- Some eye diseases

HOW:

- Sunscreen
- Sun protective clothing
- Shade & sun avoidance
- Eyewear
- Supplements/ medication

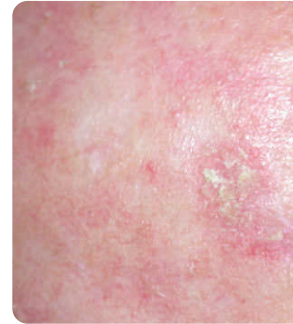
WHERE:

Important to protect both the skin and the eyes

WHAT IT LOOKS LIKE —



Sunburn from inadequate sun protection



Sun spots (actinic keratoses) due to long-term sun damage



Hats with broad brims offer the best sun protection



It's never too early to start sun protection!



Many modern sunscreens now offer a less ghostly appearance



A selection of sunscreens

Why is sun protection important?

Sun protection involves shielding your skin from the harmful effects of **ultraviolet (UV) radiation** from the sun.

UV radiation can cause **sunburn**, speed up **skin ageing**, and is the main cause of **skin cancer** (eg, basal cell carcinoma, squamous cell carcinoma, and melanoma). Sun damage to the eyes can also increase your risk of **cataracts** and **eye/eyelid cancers**.

Sun protection methods, including sunscreen, sun protective clothing, and eyewear, help reduce sun damage to keep your skin and eyes healthy.

Sun protection

SUNSCREENS —

Sunscreens are topical products applied to your skin to protect it from the sun's UV radiation.

The level of UV radiation in your area is rated on the Global Solar Ultraviolet Index ('**UV index**') each day. It is usually recommended to wear sunscreen if the UV index is 3 or higher.

A sunscreen's **sun protection factor (SPF)** rating tells you how well it shields against UVB, which is one type of UV radiation. SPF 30+ sunscreen provides high protection and SPF 50+ offers very high protection, when applied correctly.

If a sunscreen is '**broad spectrum**', it also protects against another type of UV radiation called UVA.

SUN PROTECTIVE CLOTHING —

Proper sun protective clothing is made from special UV-protective fabrics. A **UV protection factor (UPF)** of 30+ offers good protection.

Everyday clothes also offer some degree of sun protection. Fabrics that are **tightly woven** and **dark-coloured** allow less UV radiation through, as do **loose-fitting** clothing (due to having more fabric and folds).

Clothes that protect a greater area of skin are also recommended, including:

- Hats that shade the face and neck
- Long-sleeved shirts with high necklines
- Long pants or skirts
- Enclosed shoes.

SHADE AND SUN AVOIDANCE —

Sunscreens and sun protective clothing are important for sun protection, but they do not block 100% of UV radiation. It is also recommended to reduce sun exposure whenever possible, by:

- Minimising time outdoors during peak sunshine hours (~10am to 4pm in summer)
- Keeping in the **shade**
- Using an umbrella
- Tinting windows in vehicles and buildings.

EYEWEAR —

Some eyewear (eg, sunglasses, ski goggles, and UV-filtering prescription glasses) can protect your eyes and eyelids from the sun's UV radiation. This helps lower the risk of a number of eye diseases.

Darker sunglasses do not always provide better UV protection, so check the label for more information. Some contact lenses filter UV radiation, but they do not protect the whole eye or the eyelids.

Close-fitting, wrap-around sunglasses offer better protection against UV radiation from all directions, including reflected light off water or snow.

OTHER METHODS —

Nicotinamide is a form of vitamin B3. In people who have had some types of skin cancer before — BCC and SCC — it may reduce the risk of getting further skin cancers. It is not a replacement for other types of sun protection. Discuss with your doctor if nicotinamide is a good option for you.

Research is ongoing into other products that may reduce skin damage from UV radiation, such as *Polypodium leucotomos* extract and afamelanotide.

RECOMMENDATIONS —

- **Apply a high SPF and broad-spectrum sunscreen daily if the UV index is ≥3.** If outdoors, reapply sunscreen every 2 hours and after swimming/heavy sweating even if water-resistant; and wear sun protective clothes/hat/eyewear.
- **Avoid sun exposure during peak sunshine hours** (~10am–4pm in summer), and stay in the shade where possible.
- Avoid intentional tanning in the sun.
- **Avoid sunbeds**, which also use UV radiation and cause skin cancer.



<https://dermnetnz.org/topics/sun-protection>