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Sun protective clothing

To protect yourself from damage from exposure to ultraviolet (UV) radiation, wear clothing that covers as much skin as possible.

For best protection during the daily sun protection times (when the UV level is 3 and above), use all five SunSmart measures:

- Slip on clothing.
- Slop on SPF30 (or higher) broad spectrum, water resistant sunscreen.
- Slap on a broad brimmed hat.
- Seek shade.
- Slide on sunglasses.

The free SunSmart app tells you the sun protection times for your location and provides current UV levels. Sun protection times can also be found at myuv.com.au, bom.gov.au and live UV levels are also available from arpansa.gov.au/uvindex.

What should I look for when choosing sun protective clothing?

Choose clothing that covers as much skin as possible.¹ The best styles are:

- tops with collars, and sleeves of at least three-quarter length (elbow length)
- pants or skirts of at least three-quarter length (below the knee)

If you are an outdoor worker or anticipate being outdoors for an extended period of time during the sun protection times, choose long sleeves (to the wrist) and pants.

What is UPF?

Some clothing carries a tag with an ultraviolet protection factor (UPF) rating for sun protection. The UPF rating refers to both the design of the garment and its fabric. All garments that carry a UPF rating must meet the Australian Standard AS/NZS 4399:2017).

To claim a UPF rating, the garment is required to fully cover the shoulders and extend down to the hip line. It is also required to have sleeves that extend to at least as far as the three-quarter measurement between the shoulder point and the elbow. Lower body coverage should extend from the hip line to halfway down the thigh.² Cancer Council SA recommends extended coverage with at least three-quarter sleeve and pant length.

The UPF rating also provides information on how much UV will pass through unstretched, dry material. For example, material with a UPF rating of 20 would only allow 1/20th (5 per cent) of UV falling on its surface to pass through it, blocking 95 per cent of UV. Any fabric rated above UPF15 provides at least minimum protection against UV, but UPF50+ is recommended.

Some fabrics may have their rating improved by being specially treated.

UPF Classifications AS/NZS 4399:2017		
UPF rating	Classification	% UV radiation blocked
15	Minimum	93.3
30	Good	96.7
50, 50+	Excellent	98



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Which fabrics are best?

Fabrics do not need to be UPF rated to provide protection. Try to choose fabric structures, colours and other characteristics that increase protection.

Fabric structure

The tighter the fabric structure, whether knitted or woven, the better the sun protection.³ As the fibres of tightly woven fabrics are closer together, less UV radiation is able to pass through to the skin. Closely woven, lightweight natural fabrics such as linen, cotton or hemp will also help keep you cooler than synthetic fibre equivalents.

Tension

If a fabric is stretched, it will be less protective. This is common in knitted or elasticised fabrics. Take care to select the correct size for the wearer or, if wearing stretchy fabrics, choose fabric structures and colours that provide greater protection to offset the effect of the stretch.

Layering

Layering of fabrics and garments is an effective way to increase protection from UV.

Colour

Many dyes absorb UV radiation. Darker colours (black, navy and dark red) will absorb more UV radiation than light, pastel shades (white, sky blue and light green) of the same fabric type.⁴ Choose darker colours where possible. If you want to choose a light-coloured fabric, other choices such as fabric structure will become more important.

Moisture content

Fabrics offer less protection from UV radiation when wet. The level of protection will depend on the type of fabric and the amount of moisture it absorbs. To reduce the effect of the moisture, take dry clothes to change into or if dipping in and out of the water, choose a fabric that provides effective protection from UV and that will dry quickly.

Caring for your clothes

Washing new clothes can improve their sun protection, especially when made of natural fibres such as cotton, by shrinking gaps in the structure. However, old, threadbare or faded clothes may offer decreased protection over time.

UV absorbers

Some clothing is treated so it can absorb more UV radiation. Check the clothing label to see if your clothes have been treated and ensure you follow the care instructions.

More information and resources

Visit sunsmart.org.au, or contact Cancer Council SA on 13 11 20.

UV-protective clothing and accessories can be purchased at Cancer Council SA's shop or online at cancercouncilshop.org.au.

References

- 1 Gies P, Roy CR, McLennan A, Toomey S. Clothing and protection against solar UVR. *Journal of the Home Economics Institute of Australia* 1998; 5(2).
- 2 Standards Australia/Standards New Zealand. Australian/New Zealand Standard AS/NZS 4399 Sun protective clothing - Evaluation and classification Standards Australia/Standards New Zealand, 2017.
- 3 Gies P. Photoprotection by clothing. *Photodermatology, Photoimmunology & Photomedicine* 2007; 23(6): 264–74.
- 4 Gies PH, Roy CR, Toomey S, McLennan A. Protection against solar ultraviolet radiation. *Mutat Res* 1998; 422(1): 15–22.

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