

Sun-protective clothing



Cancer Council Victoria recommends clothing that provides as much ultraviolet (UV) radiation protection as possible, such as collared shirts, at least three-quarter-length trousers and three-quarter-sleeve tops. When the UV Index is 3 or above use a combination of the five SunSmart steps:

1. Slip on some sun-protective clothing.
2. Slop on SPF30+ sunscreen – make sure it is broad spectrum and water resistant. Put it on 20 minutes before you go outdoors and reapply every two hours.
3. Slap on a hat – that protects your face, head, neck and ears.
4. Seek shade.
5. Slide on some sunglasses – make sure they meet Australian Standards.

Extra care should be taken between 10 am and 2 pm (11 am to 3 pm daylight saving time) when UV Index levels reach their peak.

To find out UV Index levels look for the SunSmart UV Alert in your daily newspaper's weather section or visit:
www.bom.gov.au/weather/uv or
www.arpansa.gov.au/uvindex/realtime (for live UV levels).

This information sheet is based on recommendations from the Australian Radiation Protection & Nuclear Safety Agency's (ARPANSA) Resource Guide for UV Products. The guide can be downloaded from www.arpansa.gov.au/uvrg

Design

Choose clothing that covers as much skin as possible. Collared shirts and at least three-quarter-length trousers and three-quarter-length sleeve tops cover skin well.

A shirt with long sleeves and a large collar offers much better protection than clothing such as singlet tops. Loose-fitting clothes give better protection than close-fitting clothes and may be more comfortable to wear on hot days. Darker colours generally offer more protection than lighter colours.

What is UPF?

Clothing designed for sun protection will have a tag showing its ultraviolet protection factor (UPF) rating. The UPF rating tells you how much UV radiation will pass through unstretched, dry material.

For example, a material with a UPF rating of 20 would only allow 1/20th (5%) of the UV radiation falling on its surface to pass through it. This means that this material blocks 95% of UV radiation.

The UPF rating doesn't refer to the design of the garment, just its material. Some fabrics may have their rating improved by being specially treated.

Any fabric rated above UPF15 provides good protection against UV radiation, but UPF50+ is recommended. Fabrics that don't carry a UPF rating don't necessarily offer less protection than those that have been tested, but the rating system provides added assurance.

The Australian/New Zealand Standard for sun-protective clothing (AS/NZS 4399:1996) describes methods and labelling requirements for UPF rated clothing (see Table 1).

Sun protective clothing

UPF rating	% UV radiation absorbed	Protection category
10	90.0	moderate
15	93.3	good
20	95.0	good
30	96.7	very good
40	97.5	excellent
50	98.0	excellent

(Source: Australian Radiation Protection And Nuclear Safety Agency 2003)

What should I look for when choosing sun-protective clothing?

Composition

Different fabrics absorb UV radiation at different levels. Most cotton or cotton/polyester-blend fabrics provide protection equal to about UPF20 (which offers about 95% protection from UV radiation). Fabrics offer less protection when wet.

Fabric structure

The tighter the fabric structure, whether knitted or woven, the better the sun protection.

Because the fibres of tightly woven fabrics are closer together, less UV radiation is able to pass through to the skin. Tightly woven, lightweight fabrics such as linen, cotton or hemp will also help keep you cool.

Repeated washing can improve the UPF of clothes, especially cotton, by shrinking gaps in the weave. However, old, threadbare or faded clothes may have a lower UPF rating.

Colour

Many dyes absorb UV radiation. Darker colours (black, navy, dark red) of the same fabric type will absorb UV radiation more than light pastel shades (white, sky blue, light green). They will therefore have a higher UPF rating.

Tension

If a fabric is stretched, it will probably be less protective. This is common in knitted or elasticised fabrics. Take care to select the correct size for the wearer.

Moisture content

Many fabrics offer lower protection from UV radiation when wet. This depends on the type of fabric and the amount of moisture it absorbs. Generally, elasticised clothes retain higher levels of UV protection when wet than cotton or natural fibres.

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.

Further information and resources

Being SunSmart in Australia information sheet

Visit www.sunsmart.com.au or contact the Cancer Council Helpline on 13 11 20.

UV-protective clothing and accessories can be purchased at the Cancer Council Victoria's Carlton shop or online at www.cancervic.org.au, click on 'Our shop'.

This information can be photocopied for distribution.

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