

# SUN PROTECTION.

## Best practice guidelines for Western Australian schools

### Background

This document outlines why evidence-based sun protection should be included in the policy and practice of all Western Australian schools. It also provides key recommendations on how to reduce exposure to harmful ultraviolet radiation to students and staff. This document applies to pre-compulsory schooling, primary and secondary schools.

### Preventing Skin Cancer

Australia has one of the highest rates of skin cancer in the world, with at least two in three Australians being diagnosed with skin cancer in their lifetime.<sup>1</sup> Overexposure to ultraviolet (UV) radiation from the sun has been identified as the cause of approximately 99% of non-melanoma skin cancers, and up to 95% of melanomas in Australia.<sup>2,3</sup>

Research has established that childhood and adolescence are both critical periods during which sun exposure could contribute to skin cancer later in life. It is estimated that more than 75% of all skin cancers could be prevented by practising sun protective behaviours in childhood and adolescence.<sup>4</sup> Given the amount of time spent in schools, it is critical that adequate protection is provided during this time. In addition to the protection schools can offer from exposure to UV, the school setting provides a valuable opportunity to influence positive behaviours and establish the use of daily life long sun protection practices.

### Ultraviolet (UV) Radiation

UV radiation damages the DNA in skin cells. Damage to the skin can result in premature ageing and increases the risk of developing skin cancer. UV levels peak in the middle of the day when the sun is directly overhead. UV radiation cannot be seen or felt and is different to infra-red radiation (heat), therefore UV levels are not directly related to temperature.

### The UV Index

The UV Index indicates the strength of UV radiation reaching the ground. A UV level of 3 is high enough to cause damage to unprotected skin, therefore it is important to protect skin when the UV level is 3 and above. The higher the UV Index value, the greater the potential for skin damage. See Figure 1.

<sup>1</sup>Olsen CM, Pandeya N, Green AC, Ragaini BS, Venn AJ, Whiteman DC. Keratinocyte cancer incidence in Australia: a review of population-based incidence trends and estimates of lifetime risk. *Public Health Res Pract* 2022 Mar 10;32(1) Available from: <http://www.ncbi.nlm.nih.gov/pubmed/35290995>.

<sup>2</sup>Armstrong, B.K., *How sun exposure causes skin cancer: An epidemiological perspective in prevention of skin cancer*, D. Hill, M. Elwood, and D. English, Editors. 2004, Kluwer Academic Publishers: Dordrecht.

<sup>3</sup>Armstrong, B.K., Kricger, A., *How much melanoma is caused by sun exposure? Melanoma Research*, 1993. 3(6): pp.395-401.

<sup>4</sup>Stern, R.S., Weinstein, M.C., Baker, S.G. *Risk reduction for non melanoma skin cancer with childhood sunscreen use. Archives of Dermatology* 1986; 122: 537-45.

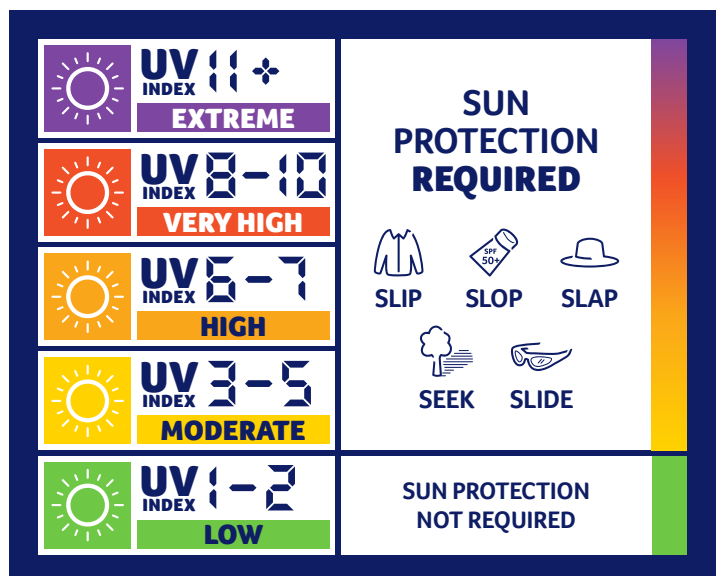


Figure 1

The UV forecast (not the temperature) should be used as the guide when assessing whether sun protection is required for outdoor activities. Your local UV forecast will give you the day's maximum UV strength and sun protection times (the period when UV will be 3 or higher). The UV forecast is available through the SunSmart Global UV app, the Bureau of Meteorology website, or at [myuv.com.au](http://myuv.com.au).

In Western Australia the UV radiation levels are 3 and above for the majority of the year. Schools that do not require sun protection to be used for the whole of terms 2 and 3 are putting their students at risk of skin damage. For areas north of Perth, the UV Index will usually exceed 3 at midday every day of the year. Schools in this region should require students and staff to adhere to sun protection policies all year. Areas south of Perth can experience midday UV readings of less than 3 in June and July. It is acceptable to go without sun protection on days when the UV Index is below 3.

## Duty of Care

Duty of care is a legal duty to take reasonable care to minimise the risk of foreseeable harm to students. UV radiation is listed as a Group 1 carcinogen by the World Health Organization. Group 1 carcinogens are proven to cause cancer in humans. Skin damage may occur without any sign of sunburn. Any activity that involves students being outdoors for any period of time should be seen as potentially placing them at risk of sunburn and other skin damage, and subsequent skin cancer. In other words, a school has a duty of care to implement sun protection policies and practices.

## Workplace Health and Safety

Exposure to UV radiation is an occupational hazard for people who spend all or part of their working day outside. Health and safety legislation in each Australian state requires employers to provide a safe working environment. This legislation also states that employees must cooperate with a workplace's sun protection requirements.

## Vitamin D

Exposure to UV has risks and benefits for health, including allowing your body to make vitamin D. The balance of the harms and benefits of sun exposure are not the same for all people. Most Australian adults achieve adequate vitamin D levels through incidental sun exposure. If individuals are concerned about their skin cancer risk and/or vitamin D levels, it is recommended that they consult with their GP. There are currently no nationally recognised vitamin D guidelines for children.

# Effective sun protection in schools

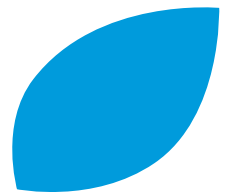
Schools are encouraged to approach sun protection in an integrated and comprehensive way with links between policy, curriculum, and environment.

## Policy

It is recommended that all schools have a comprehensive sun protection policy that is implemented when the UV level is 3 and above and that the policy covers the areas of:

- Curriculum
- The environment (e.g. shade)
- Skin protection (e.g. clothing, broad-brimmed, bucket or legionnaire's hats, sunscreen)
- Scheduling of outdoor activities to minimise exposure during peak UV radiation times

Schools are encouraged to contact Cancer Council WA or access SunSmart template policies when establishing a local sun protection policy.



## Recommended sun protection strategies

Cancer Council WA recommends that schools employ as many of the measures below as possible whenever students and staff are outside while the UV Index is 3 or higher.

Protect yourself in **five ways** from skin cancer



**SLIP**

on sun protective clothing



**SLOP**

on SPF50+ or higher sunscreen



**SLAP**

on a sun protective hat



**SEEK**

shade



**SLIDE**

on sunglasses

### Uniforms, clothing and hats

- All staff and students wear a broad-brimmed, legionnaire or bucket hat that protects the face, neck, ears and crown of the head when outside. Caps are not sun protective and should not be permitted.
- Spare hats should be available for students to ensure their play time is not restricted if they forget their hat, or students without hats should be encouraged to play in the shade.
- Sun protective clothing is required in the school uniform/dress code (i.e. collared shirts, elbow or full length sleeves, longer shorts, skirts or long pants), including sports uniforms. Fabric with a UPF rating of 50+ is chosen where possible.
- Staff and students wear a rashie or similar top for swimming/water activities (may not be appropriate for competitive swimming).
- Adults wear appropriate sunglasses and students have the option to wear them.

### Shade

- The school has sufficient shade or is working towards increasing shade (natural or built) in the school grounds, especially in areas where students congregate at break time.
- The use of shade (including temporary shade) is maximised during outdoor activities and indoor facilities are used wherever possible.

### Scheduling

- When outdoor activities are scheduled at times when the UV Index is 3 or higher, maximum use is made of shade, sunscreen, hats and long clothing to protect students and staff.
- Where possible, outdoor activities are scheduled out of peak UV times.

### Sunscreen

- Sunscreen is available and accessible to all staff and students.
- The use of SPF50+ or higher broad spectrum, water resistant sunscreen is required before outdoor activities, recess and lunch. Time is given to apply sunscreen and reapplication after 2 hours is encouraged during extended outdoor periods.

### Other recommendations

- Positive role modelling of sun protection behaviour is demonstrated by all school staff, parents and visitors.
- Include lessons on skin cancer prevention in the curriculum.
- Physical activity and play in conjunction with sun protection policies is promoted. 'No hat, no play' policies are counter-productive for physical activity. 'No hat, play in the shade' is a preferable approach.

## More information

Contact Cancer Council WA on **08 9212 4333** or email [sunsmart@cancerwa.asn.au](mailto:sunsmart@cancerwa.asn.au).

Information and educational resources specifically designed for teachers, school health nurses and school administrators can be found at [generationsunsmart.com.au](http://generationsunsmart.com.au).

For information, facts and support on skin cancer or other cancer issues call Cancer Council WA on **13 11 20**.