

SUN PROTECTION.

Best practice guidelines for Western Australian early childhood and out of school hours care services

Background

Cancer Council WA has a proud history of promoting skin cancer awareness and prevention. Since 1998, our SunSmart programs have empowered schools and early childhood services to minimise damaging exposure to ultraviolet (UV) radiation from the sun for children, staff and the wider community.

This document outlines Cancer Council WA's evidence-based sun protection rationale and recommendations. By implementing best practice sun protection measures and teaching sun protection habits from an early age, early childhood education and care (ECEC) and out of school hours care (OSHC) services can play a significant role in reducing exposure to harmful levels of UV radiation to children and staff, potentially reducing the life time risk of skin cancer. These guidelines are applicable to all Western Australian child care services, family day care services, playgroups, OSHC, vacation care and kindergartens/pre-schools.

Preventing Skin Cancer

Australia has one of the highest rates of skin cancer in the world, at least two in three Australians being diagnosed with skin cancer in their lifetime¹. Overexposure to 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^{2,3}.

Research has established that childhood and adolescence are 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 adolescence⁴. ECEC and OSHC services can protect children from overexposure to UV, as well as provide a valuable opportunity to influence positive behaviours and establish daily life-long sun protection practices.

UV Radiation

UV radiation damages the DNA in skin cells. Damage to these cells 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, as shown in the UV forecast graph in Figure 1. UV radiation cannot be seen or felt and is different to infra-red radiation (heat), therefore UV levels are not directly related to temperature.

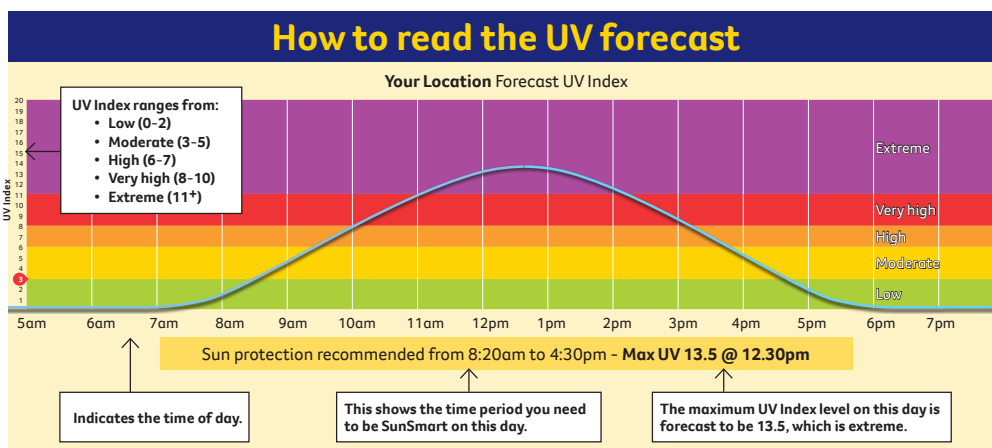


Figure 1: How to read the UV index

¹ Olsen C, Pandeya N, Green A, Ragaini B, Venn A, Whiteman D. Keratinocyte cancer incidence in Australia: a review of population-based incidence trends and estimates of lifetime risk. *Public Health Research & Practice*. 2022.

² 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.

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

⁴ 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.

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 2.

The UV forecast (not the temperature) should be used to guide whether sun protection is required for outdoor activities. The UV forecast will vary according to location (how far north or south you are), time of year and some other weather conditions. Your local UV forecast will give you the day's maximum UV strength and sun protection times, which is the period when UV will be 3 or higher. The sun protection times will be longer in summer than in winter. The UV forecast should be checked daily and is available on the free SunSmart Global UV app, the Bureau of Meteorology website and app, or at myUV.com.au.

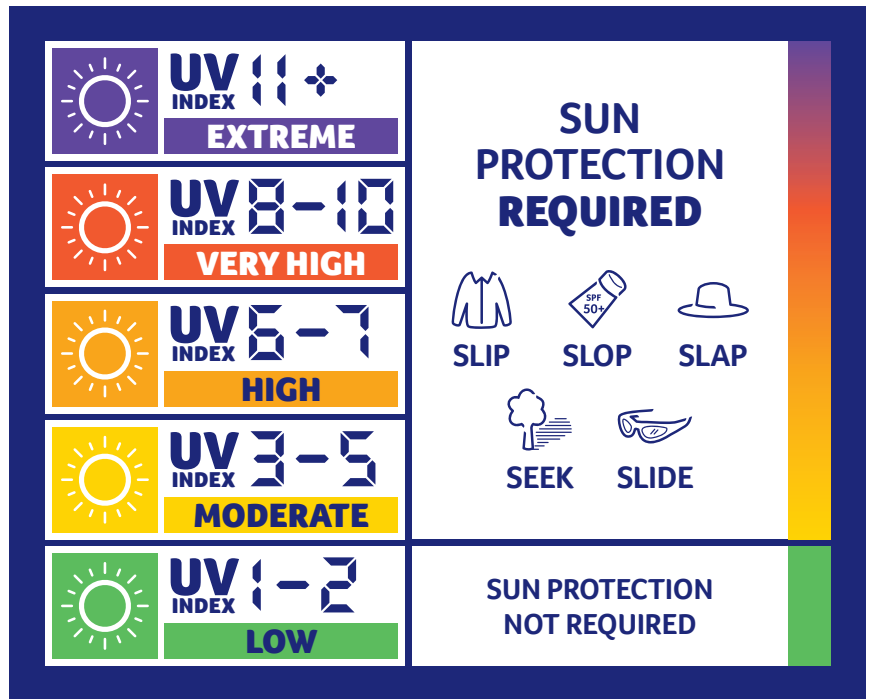


Figure 2: The UV Index

In Western Australia, UV levels are 3 and above for the majority of the year. For areas north of Perth, the UV Index will usually exceed 3 at midday every day of the year. Services in these locations should require children 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. 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 children being outdoors when the UV is 3 or above for any period of time without sun protection is potentially placing them at risk of sunburn and other skin damage, increasing their future skin cancer risk. In other words, services have 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 Australians 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 practices

ECEC and OSHC services are encouraged to approach sun protection in an integrated and comprehensive way with links between policy, learning activities and the physical environment.

Policy

It is recommended that all ECEC and OSHC services have a comprehensive sun protection policy that is implemented when the UV level is 3 and above. The policy should cover the areas of:

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

Services are encouraged to contact Cancer Council WA or access SunSmart template policies when creating or reviewing their sun protection policy.

Recommended Sun Protection Strategies

Cancer Council WA recommends that as many of the measures below as possible are employed whenever children and staff are outside while the UV Index is 3 or above. These recommendations apply to all skin tones. Active play is encouraged year round.

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 children and staff.
- Where possible, outdoor activities are scheduled to minimise time outdoors when the UV Index is 8 and above.
- ECEC and OSHC services are not required to cease outdoor play when the UV reaches a certain level provided that children are adequately protected from UV.

Clothing and hats

- All staff and children 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.
- Sun protective clothing is required in the staff uniform and dress code for children (i.e. collared shirts, elbow or full length sleeves, longer shorts, skirts or long pants). Fabric with a UPF rating of 50+ is chosen where possible.
- Children without sun protective hats and/or clothing will remain protected from the sun. Spare hats and sun protective clothing should be available for children to ensure their play time is not restricted if they forget, or children without suitable hats and/or clothing should play in the shade or indoors.
- Staff and children wear a rashie or similar top for swimming/water activities.
- Adults wear close-fitting, wrap-around sunglasses and children have the option to wear them.

Sunscreen

- Sunscreen is available and accessible to all staff and children.
- The application of SPF50 or SPF50+ broad spectrum, water resistant sunscreen is required 20 minutes before outdoor activities. Sunscreen is reapplied after 2 hours or more frequently if washed or wiped off.
- Some infants and children can develop skin irritations. A patch test on a small area of skin is recommended to check for allergies or reactions to a particular brand of sunscreen.
- The recommended application for adults is approximately one teaspoon for each arm, leg, front of body, back of body and face (including neck and ears). This equates to approximately seven teaspoons for a full body application. Application for children should be adjusted proportionately according to their body size.
- Children are encouraged to apply their own sunscreen with supervision from the age of approximately 2 to 3 years old.

Shade

- The service has sufficient shade or is working towards increasing shade (natural or built) in outdoor areas.
- Children will be actively encouraged to use shade for outdoor play activity. Outdoor activities are planned to occur in shaded areas.
- The availability of shade is considered when planning excursions and all outdoor activities.
- Vehicle side windows have UV protection with a shade visor or a window tint.
- Adequate shade is provided when using a pram, pusher or stroller, for example, an adjustable hood and cover.

Sun protection and babies

- A baby's skin is thin, extremely sensitive and can burn easily, therefore babies under 12 months should not be exposed to direct sun when the UV Index is 3 or above.
- If babies are kept out of the sun or well protected from UV radiation by clothing, hats and shade, then sunscreen need only be used occasionally on very small areas of a baby's skin. The widespread use of sunscreen on babies under six months old is not recommended. Choose a sunscreen that is suitable for babies such as a sensitive or toddler sunscreen. These are just as protective, but much gentler on their skin.

Other recommendations

- Positive role modelling of sun protection behaviour is demonstrated by all staff, parents and visitors.
- Information is provided to parents on sun protection policy and practice.
- Activities on skin cancer prevention are included in learning experiences.
- 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.

Information and educational resources specifically designed for teachers, educators and staff can be found at generationsunsmart.com.au.

For information and support on skin cancer or other cancer-related issues, speak to a cancer nurse on our **13 11 20** cancer information and support line.

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



SLIP
on sun
protective
clothing



SLOP
on SPF 50
or higher
sunscreen



SLAP
on a sun
protective
hat



SEEK
shade



SLIDE
on sunglasses

