SunSmart Policy

Bracknell Primary School

Tasmania
Explore the possibilities

RATIONALE

Over-exposure to UV (ultraviolet) rays causes sunburn, skin damage and increased risk of skin cancer. **Inappropriate sun exposure in the first 18 years of life contributes significantly to the lifetime risk of developing skin cancer.** However, some skin exposure to the sun's UV rays is needed for the production of vitamin D, vital for maintenance of healthy bones, teeth and general good health.

Being SunSmart is a whole-of-year approach. It means using sun protection when the UV is 3 and above (mid-September to mid-April), and safe sun exposure for vitamin D (mid-April to mid-September).

PURPOSES

To ensure children and staff maintain a healthy UV balance all year round.

To encourage sun protection when the UV is 3 and above (mid-September to mid-April) and safe sun exposure for vitamin D (mid-April to mid September).

To adopt sun protection measurers balanced with the need for students and staff to be outdoors.

Educate staff and children on appropriate sun protection measures and encourage students to make responsible decisions in relation to their sun protection.

STRATEGIES

Staff are encouraged to check the UV Alert on a daily basis.

Staff and students use a combination of sun protection measures from mid-September to mid-April, when average peak UV levels in Tasmania reach 3 and above.

GUIDELINES

1. Clothing

- Sun-safe clothing is part of our school and sports uniform. This includes shirts with collars, sleeves, longer style dresses and shorts and rash vests or T-shirts for outdoor swimming.
- Clothing exposing large amounts of shoulder and upper torso eg. singlets, tank tops and strappy dresses are not considered suitable.

2. Sunscreen

- The use of SPF 30+ (or greater), broad-spectrum sunscreen is encouraged.
- Where possible SPF 30+ broad-spectrum water-resistant sunscreen is available for use.
- Sunscreen is applied 20 minutes before going outdoors and reapplied every 2 hours.

3. Hats

- Students are required to wear sun-safe hats that protect the face, neck and ears when outside. Recommended sun-safe hats include legionnaire, broad-brimmed and bucket hats. Baseball caps do not offer enough protection and are not recommended.

4. Shade

- The school community is committed to providing shade in areas where students gather such as for eating, outdoor teaching and popular play areas. The use of these areas is encouraged.
- Availability of shade is considered when planning excursions and all outdoor activities.

5. Sunglasses

- Close-fitting wrap-around sunglasses that comply with Australian Standards AS1067:2003 (Category 2, 3 or 4) <u>are encouraged but optional</u>.

Students without a sun-safe hat or clothing must play in areas protected from the sun.

ADVICE FOR DARKER SKINNED CHILDREN

Students with naturally very dark skin (skin types 5 and 6 – see Fitzpatrick Skin Type Chart) may need 4-6 times as much sun for vitamin D production and do not need long-sleeved tops or sunscreen, unless outdoors for extended periods. However, they should still wear hats or sunglasses to protect their eyes when UV is 3 or above.

To help maintain adequate vitamin D levels sun protection will not be used from mid-April to mid-September, when average peak UV levels are below 3 unless in alpine regions, near highly reflective surfaces such as water and snow or outdoors for extended periods.

STAFF OHS, ROLE MODELLING AND EDUCATION

When UV is 3 and above staff will role model sun protection behaviours when outside by using the combination of sun protection measures outlined above.

Families and visitors are encouraged to use a combination of sun protection measures when participating in and attending outdoor school activities.

Programs on skin cancer prevention and vitamin D are included in teaching programs for all year levels

SunSmart behaviour is regularly reinforced and promoted to the whole school community through newsletters, meetings, assemblies and upon enrolment.

PLANNING

Ensure SunSmart policy is reflected in the planning of all outdoor events and excursions.

Where possible, outdoor activities will be planned away from the middle of the day during the period mid-September to mid-April (when UV levels reach 3 and above).

REVIEW

School's sun protection policy will be submitted for review to Cancer Council Tasmania once every three years, for updating as new evidence becomes available.

This information is based on current evidence available at time of review. Last updated: July 2013.
For more information e: sunsmart@cancertas.org.au
Ph: (03) 6242 8103 w: www.cancertas.org.au.

This policy will be reviewed in 2017 or earlier if required.

Ratified by the School Association - August 2014

Australian Government
Australian Radiation Protection and Nuclear Safety Agency

Fitzpatrick Skin Type

The most commonly used scheme to classify a person's skin type by their response to sun exposure in terms of the degree of burning and tanning was developed by Thomas B. Fitzpatrick*, MD, PhD. Examples are given below.

* Fitzpatrick, T.B. (1988) The validity and practicality of sun reactive skin types I through VI. Arch Dermatol 124; 869-871.

Eye colour

0. Light colours
1. Blue, gray or green
2. Dark
3. Brown
4. Black

Natural hair colour

0. Sandy red
1. Blond
2. Chestnut or dark blond
3. Brown
4. Black

Your skin colour (unexposed areas)

0. Reddish
1. Pale
2. Beige or olive
3. Brown
4. Dark brown

Freckles (unexposed areas)

0. Many
1. Several
2. Few
3. Rare
4. None

If you stay in the sun too long?

0. Painful blisters, peeling
1. Mild blisters, peeling
2. Burn, mild peeling
3. Rare
4. No burning

Do you turn brown?

0. Never
1. Seldom
2. Sometimes
3. Often
4. Always

How brown do you get?

0. Never
1. Light tan
2. Medium tan
3. Dark tan
4. Deep dark

Is your face sensitive to the sun?

0. Very sensitive
1. Sensitive
2. Sometimes
3. Resistant
4. Never have a problem

How often do you tan?

0. Never
1. Seldom
2. Sometimes
3. Often
4. Always

When was your last tan?

0. +3 months ago
1. 2–3 months ago
2. 1–2 months ago
3. Weeks ago
4. Days

Score		
0–6	Skin Type I	Always burns, never tans (pale white skin) 
7–13	Skin Type II	Always burns easily, tans minimally (white skin) 
14–20	Skin Type III	Burns moderately, tans uniformly (light brown skin) 
21–27	Skin Type IV	Burns minimally, always tans well (moderate brown skin) 
28–34	Skin Type V	Rarely burns, tans profusely (dark brown skin) 
35+	Skin Type VI	Never burns (deeply pigmented dark brown to black skin) 

* The information published here is not intended to take the place of medical advice. Please seek advice from a qualified health care professional.

Cancer Council Tasmania

Vitamin D in Tasmania - getting the right UV balance

How to safely get vitamin D from the sun in Tasmania

Vitamin D is needed for good health and is mostly produced in the body when your skin is exposed to sunlight. The amount of vitamin D your body produces from the sun depends on your skin type, the amount of skin you expose, the strength of the sun (UV Index) and the duration of your exposure. As a guide, Cancer Council Tasmania suggests the following:

When the UV Index is high (6 or above) – often occurs mid-October to mid-March

- Have regular exposure to the sun (1-2 times daily).
- Keep exposures short (10-15 minutes), so you reduce the risk of sunburn.
- Expose lots of skin, so you produce vitamin D in a shorter time.
- Use sun protection for longer exposures when the UV is 3 and above.
- **Avoid sunburn - it increases your risk of skin cancer.** Fair skinned people can burn within 15 minutes when the UV Index is 9 or above, so check the index regularly and exercise caution.

When the UV Index is moderate (3-5) – often occurs mid-March to mid-April and mid-September to mid-October

- This is a great time to top up on vitamin D and reduce the drop in levels over Winter. Enter Winter months with higher vitamin D levels by getting extra sun mid-March to mid-April, and boost your levels again after Winter by getting extra sun mid-September to mid-October.
- Have regular (1-2 times daily) and short (10-15 minutes) exposures to the sun.
- Use sun protection for longer exposures when the UV is 3 and above and always avoid sunburn.

When the UV Index is low (below 3) – from mid-April to mid-September

- It is difficult to produce adequate vitamin D during this period.
- Longer exposures to the sun are needed, so get outside as much as possible.
- Being outside at midday is best!
- Expose as much skin as possible.
- No hats or sunscreen unless outdoors for long periods or near reflective surfaces such as water or snow.

People with naturally very dark skin may require 3 - 6 times as much sun exposure as fair skinned individuals.

Menzies Research Institute Tasmania

SunSmart

What is vitamin D and why is it important?

Vitamin D is produced in the body when the skin is exposed to sunlight. Adequate vitamin D is crucial for bone and muscle development, and for the prevention of osteoporosis. Recent evidence shows that vitamin D deficiency might also be linked to diseases such as multiple sclerosis, colorectal cancer, type 1 diabetes, cardiovascular disease and tuberculosis. The Australian diet provides insufficient vitamin D for health needs.

Vitamin D deficiency is common in Tasmania

In summer and autumn around 33% of Tasmanian teenagers and adults are vitamin D deficient (blood vitamin D level <50 nmol/L), and in winter and spring around 66%. In winter even those who spend a lot of time outside can be deficient. Studies show primary school aged children are much less likely to be deficient as they play outside all year round.

Sectors of the community more at risk of vitamin D deficiency

- People who spend little time outdoors during the day.
- People who are only outdoors when UV levels are low (early morning or late afternoon).
- People who use sun protection all year round, including sunscreen, moisturisers or cosmetics with UV protection.
- People with naturally dark skin, including people from Asia (Northern, South East and Central Asia), Africa, and Pacific Islands, because they may need 3 – 6 times more UV exposure than those with fair skin.
- People who cover their skin for religious or cultural reasons.
- People who are overweight or obese.
- Tasmanians in winter, because the UV is low and most people's skin is covered when outside.
- Babies of vitamin D deficient mothers.

Your GP can provide individualised advice. For some people Vitamin D supplementation is an alternative method to increase vitamin D levels.

How do I know how high the UV index is?

The UV index gives you information on the strength of the sun.

Check the UV Index daily at: **www.cancertas.org.au**, **www.bom.gov.au/uv**, in the weather section of the newspaper and as a free app for smart phones from **www.sunsmart.com.au/resources/sunsmart-app.**

Last Updated: August 2012

Cancer Council Tasmania

Real Help

Being SunSmart in Tasmania

Australia has one of the highest rates of skin cancer worldwide. At least two in three Australians will develop skin cancer before the age of 70. Our skin cancer rates are high due to our fair skin and because Australia experiences some of the highest levels of UV radiation in the world. Even on cool or cloudy days, UV radiation can still be strong enough to damage unprotected skin and eyes.

Always avoid sunburn and when UV is 3 or above use these five steps to protect against sun damage:

Slip on some sun protective clothing

Cover as much skin as possible. Long pants and shirts with a collar and long sleeves are best. Choose lightweight, closely woven material with an ultraviolet protection factor (UPF) 50+.

Slap on a hat

A hat should shade your face, ears and neck. Broad brimmed hats should have a minimum 7.5cm brim. Bucket hats should have a deep crown, angled brim of minimum 6cm and sit low on the head. Legionnaire hats should have a flap that covers the neck and joins to the sides of the front peak.

Slop on minimum SPF30+ sunscreen

Sunscreen does not provide 100% protection, so never rely on sunscreen alone. Choose sunscreen that is broad spectrum and water resistant. Apply sunscreen generously to clean, dry skin 20 minutes before you go outdoors. Reapply every two hours or more often when sweating.

Seek shade

Staying in the shade is one of the most effective ways to reduce sun exposure. Whatever you use for shade, be it trees, built shade structures or some form of portable shade, make sure it casts a dark shadow.

Slide on some sunglasses

Wear close fitting, wraparound style sunglasses. When buying new sunglasses, check the tag to ensure they meet the Australian Standard (AS/NZ 1067:2003 - category 2, 3 or 4) and are safe for driving. Polarised lenses reduce glare and make it easier to see on sunny days.

Remember to use these five steps together for best protection.

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Cancer Council Helpline 13 11 20
cancertas.org.au

UV Radiation

You can see visible light (sunlight) and feel infrared radiation (heat) but you cannot see or feel UV radiation. UV can be high even on cool and cloudy days, so use the UV Index to determine when you need sun protection. Always avoid getting burnt.

How do I check the UV index?

UV can start to do damage when it reaches levels of 3 and above. The SunSmart UV Alert tells you what the UV index is over the day and what time period sun protection is required. The SunSmart UV Alert can be found at www.cancertas.org.au, www.bom.gov.au/weather/uv, in the weather section of the newspaper and as a free iPhone or Android app from www.sunsmart.com.au/resources/sunsmart-app. It can be checked on a daily basis to give guidance on sun protection for each day. More information can be found at: http://www.bom.gov.au/uv/.

Vitamin D

Vitamin D is very important for overall health and well-being. The sun is the best natural source of vitamin D, which forms in the skin when exposed to UV sunlight. In Tasmania around 33% of adults and teenagers are vitamin D deficient during summer and 66% are deficient during winter. In Tasmania from mid-April to mid-September UV levels are below 3. During this period most people with fair to olive skin need around 30 minutes of sun exposure per day, near midday, to the hands, arms, neck and lower legs (or equivalent skin area) for vitamin D. From mid-September to mid-April most people with fair to olive skin need 5-10 minutes of unprotected sun exposure per day, to the hands, arms, neck and lower legs (or equivalent skin area) for vitamin D. People with naturally dark skin may need more sun exposure to meet their vitamin D requirements. There is a lot variation between people and these recommendations may not suit everyone. Please see your GP for individualised advice. For more information visit www.cancertas.org.au/healthyliving/sunsmart.

Last updated July 2013

Cancer Council Tasmania

Real Help

Information Sheet

SunSmart Eyes

Key Points

- Ultraviolet (UV) radiation can damage your eyes, as well as your skin.
- To protect your eyes:
  - Wear close-fitting and wrap-around sunglasses. For best protection tag should read Australian Standard 1067:2003 (category 2,3 or4).
  - Sunglasses with an eye protection factor (EPF) of 10 exceed the standard and may provide even greater protection.
  - Wear a hat: a broad-brimmed, legionnaire or bucket style will shade your eyes and reduce the amount of UV radiation reaching your eyes.
- Sunglasses should be combined with other sun protection measures, such as seeking shade and wearing SunSmart clothing and hats when UV is 3 or above.

How UV radiation can damage your eyes

UV radiation can cause both short-term eye problems and permanent eye damage.
Short-term problems include excessive blinking, swelling or difficulty looking at strong light[1]. UV exposure can also cause acute photo keratopathy, which is sunburn of the cornea, like snow blindness or welders' flash burns.

Exposure to UV radiation over long periods can cause more serious damage to the eyes[1-8], including:

- cataracts (cloudiness of the lens), which may require surgery
- solar keratopathy (cloudiness of the cornea)
- cancer of the conjunctiva (the membrane covering the white part of the eye)
- skin cancer of the eyelids and around the eyes
- pterygium (pronounced tur-rig-i-um), an overgrowth of the conjunctiva onto the cornea.

Protecting your eyes

Wear a hat

Sunglasses and a sun smart hat can stop up to 98% of UV radiation reaching your eyes[9].

Choosing the right sunglasses

Sunglasses don't have to be expensive to be effective, but some cheaper fashion sunglasses don't provide good sun protection.

Make sure your sunglasses:

- meet the Australian Standard 1067:2003 the standard has five categories of sun protection, ranging from 0 (very low sunglare protection, some UV protection) to 4 (very high sunglare reduction, good UV protection). Choose sunglasses that have category 2,3 or 4 sun protection or an eye protection factor (EPF) of 10[10,11].
- are wrap around and close-fitting and have large lenses, which help to reduce reflected UV radiation and glare that can pass around the edge of the sunglasses.

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Sunglasses for children

There is no recommended age for a child to wear sunglasses, but the earlier their eyes are protected against/from UV radiation the better. If you buy sunglasses for your baby or child, make sure they meet the Australian Standard 1067:2003 and fit closely to their face. Avoid toy sunglasses, which are great for dress-ups but little use for sun protection.

Even without sunglasses, a well-designed hat can substantially reduce the amount of UV radiation reaching children's eyes[12], while also protecting their face, neck, ears and head.

Recommended hats are broad brimmed (brim size at least 6cm), legionnaire or bucket (brim size at least 5cm). Avoid baseball caps — they don't protect the ears and back of the neck.

We recommend that all children wear a hat or sunglasses when UV is 3 or above irrespective of skin colour

Prescription sunglasses

The Australian Standard doesn't cover tinted or clear prescription glasses and it's best to talk to your optometrist about your options. Some tinted or clear prescription lenses protect against UV radiation, or lenses can be coated with a UV protective layer. However lenses that darken when exposed to sunlight reduce glare but may not filter out UV radiation.

Eye protection at work

For sun protection in the workplace, tinted eye protectors that comply with Australian Standard 1337:1992 provide at least the same amount of protection against UV radiation as sunglasses.

Eye protection at the snow

Snow blindness — sunburn on the surface of the eye — is a risk at the snow. While it usually lasts only a few days, snow blindness can be painful and contribute to long-term damage, such as cataracts.

When at the snow always protect your eyes from glare and reflected UV radiation with wrap-around sunglasses or snug-fitting goggles.

Check the label to ensure glasses or goggles meet the Australian Standard 1067:2003. For more information on skin cancer prevention and sun protection

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Last Updated: July 2011

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[3] Moran D, Hollows F. Pterygium and ultraviolet radiation: a positive correlation. Br J Ophthalmol 1984; 68: 343-346.
[4] Roberts T. Coroneo M. Pterygium: the curse of the Australian Sun Lover. Modern Medicine 1999; September; 31-35.
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[9] Australian Standard AS 1067 92003) Sunglasses and Fashion Spectacles.
[10] McCarty C.A. et al. Epidemiology of pterygium in Victoria, Australia. Br J Ophthalmol 2000; 84: 289-292.
[11] Wlodarczyk J. et al. Pterygium in Australia: a cost of illness study. Clin Experiment Ophthalmol 2001; 29: 370-375.
[12] Choice. Eye Safety. Sunglasses. Choice Magazine 1999; October: 8-11

Cancer Council Tasmania

Real Help

Sunscreen Information Sheet

Cancer Council Tasmania recommends SPF30+ broad spectrum, water-resistant sunscreen. Sunscreen is an important sun protection measure, but in most circumstances should not be the first or only line of defence against ultraviolet radiation (UVR) from the sun. Sunscreen should be used, when UV is 3 and above, in combination with appropriate hats, clothing, sunglasses and where possible seeking shade.

Why should I wear a sunscreen?

Australia has the highest rates of skin cancer in the world. UV radiation from the sun can cause skin damage, ageing, wrinkles, sunburn and skin cancer. Sunscreen can effectively stop most UV radiation from penetrating your skin if used according to the directions, and prevent skin damage.

When should I wear sunscreen?

Use sunscreen in combination with other sun protection measures when UV is 3 and above. Apply to uncovered skin, under thin or open weave clothes. This includes: when swimming, on water or snow, on building sites, or near reflective surfaces such as light coloured walls.

How should I apply sunscreen?

SPF30+ sunscreen should be applied at least 20 minutes before going outside and reapplied every two hours. If swimming or sweating, apply more often.

Be generous, the average-sized adult should apply more than half a teaspoon (3mL) to each arm and to the face, neck and ears. They should apply just over one teaspoon (6mL) to each leg, front of body and back of body. That is 35mL of sunscreen for one full body application.

Sunscreen ingredients, are they safe and how do they work?

In Australia, sunscreens with a sun protection factor (SPF) rating of 4 or above must be listed on the Australian Register of the TGA (Therapeutic Goods Association). Products can only be listed on the register if they are tested in accordance, and comply with, the Australian/New Zealand Standard AS/NZS 2604: 1998 'Sunscreen Products - Evaluation and Classification'.

Sunscreen filters UV in one of two ways:

- Chemical barrier: ingredients absorb UVR. Examples include octyl methoxycinnamate (OMC) and methylbenzylidene camphor (also UVB filters) and butyl methoxycinnamate (a UVA filter).
- Physical barrier: ingredients reflect UVR away from your skin, such as zinc oxide and titanium dioxide, which are also UVA and UVB filters.

Nanoparticles in sunscreen: Two common ingredients in sunscreen, zinc oxide and titanium dioxide, give the skin a white appearance upon application. In order to reduce the visibility of sunscreens, nanoparticles (particles that are 1 – 100 nanometres, **OR** 0.000000001 – 0.0000001 m in size) of these substances are sometimes used. The TGA conducted a review of scientific literature available on using nanoparticles in sunscreens and concluded that there is no evidence that sunscreens containing zinc oxide and/or titanium dioxide nanoparticles pose any risk to users.

For the majority of people sunscreens can be used without any problems. Some people may experience short-term skin irritation, stinging or development of a rash. Occasionally people become

allergic to one or more of the components of sunscreen. If you react to one sunscreen talk to your doctor or chemist about what sunscreen might suit your skin.

For further information about sunscreen ingredients visit: www.cancer.org.au or www.tga.gov.au

What does SPF mean?

Sunscreens are not able to filter out 100% of the UV radiation reaching the skin. SPF (Sun Protection Factor) is a laboratory measure that grades the ability of a sunscreen to filter out UV radiation. The SPF number is only a guide to the sunscreens protective properties. How long a person will take to burn depends very much on the time of day, the time of year, the amount of reflection, how cloudy it is and their skin type. In laboratory conditions, products rated SPF30+ filter out 96.7%, and products rated SPF 50+ filter out 98% of UV radiation. Cancer Council recommends using a sunscreen that is SPF 30+ or above.

The meaning of 'broad-spectrum'

There are different types of UV radiation. UVA radiation penetrates deep into the skin, affecting the living skin cells that lie under the skin's surface. UVA causes long-term damage like wrinkles, premature ageing, roughening, and also skin cancer. UVB radiation penetrates the top layer of skin and causes skin damage and skin cancer.

All sunscreens with an SPF number will filter out the UVB part of the ultraviolet radiation. Those labeled 'broad-spectrum' will filter out UVA as well as UVB rays.

Skin colour, sun protection and vitamin D advice

We all need a safe amount of sun exposure for the synthesis of adequate vitamin D, essential for bone and muscle strength and overall health. How much we need varies according to our skin colour. A naturally very dark skinned person needs 4-6 times the amount of unprotected sun exposure as needed by a light to olive skinned person to generate the same amount of vitamin D.

Generally it is recommended that naturally very dark skinned people (skin types 5 and 6) should wear no special sun protection other than a hat or sunglasses to protect the eyes. For this group, no extra skin protection such as sunscreen should be needed unless outside for extended periods in high UV times.

Sunscreen and babies

Infants (under 12 months) have thin and highly sensitive skin; they should be kept out of direct sunlight when UV is 3 and above. If this is unavoidable, clothing, hats and shade structures should be the first line of defence, however, if necessary, small amounts of sunscreen should be applied to any exposed skin.

More information is available from Cancer Council Tasmania

T: 6242 8104 E:sunsmart@cancertas.org.au and from:

http://www.cancer.org.au/HealthProfessionals/PositionStatements/sunsmart/useofsunscreens.htm

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