

Being SunSmart – Protecting children from the sun



The Sun – a healthy balance

Australia has one of the highest rates of skin cancer in the world and sun protection is very important for all of us.

Too much ultraviolet (UV) radiation from the sun can cause sunburn, skin damage, eye damage and skin cancer. Overexposure to UV radiation during childhood and adolescence is known to be a major cause of skin cancer and two in three of us will develop some form of skin cancer before we reach the age of 70. Fortunately being SunSmart is a simple and effective way to reduce the risk of skin cancer.

The Sun – UV radiation

UV radiation – not temperature – is the most important factor in the risk of skin damage and skin cancer. You can see sunlight (visible light) and feel heat (infrared radiation), but you cannot see or feel UV radiation. UV radiation comes directly from the sun and can also be scattered in the air and reflected by surfaces such as buildings, concrete, sand, snow and water. UV radiation can also pass through light cloud. UV radiation from the sun and artificial sources such as solariums is known to cause skin damage and skin cancer in humans.

The UV index

The UV Index indicates the amount of the sun's UV radiation that reaches the earth's surface. The higher the UV Index level, the greater the potential for damage to your skin. The UV Index is divided into categories which correspond to the level of risk. This ranges from low (1–2) to extreme (11+). When UV Index levels reach 3 (moderate) and above, sun protection is needed because this is when UV radiation can damage the skin and eyes and lead to skin cancer.

In Victoria, average UV Index levels are 3 and above **from the beginning of September until the end of April**. Particular care should be taken between 10 am – 2 pm (11 am – 3 pm daylight saving time) when UV Index levels reach their peak.

From May to August in Victoria, average UV Index levels are below 3 (low) so sun protection isn't needed during these months unless you are in alpine regions or near highly reflective surfaces such as snow or water.

The SunSmart UV Alert

The SunSmart UV Alert is a tool to let you know what the UV levels are for the day and when sun protection is needed. You can find the SunSmart UV Alert in the weather section of your daily newspaper or by visiting:

W www.sunsmart.com.au or www.bom.gov.au/announcements/uv/

There is a SunSmart UV Alert for over 300 cities across Australia. When UV Index levels are below 3, no UV Alert is issued.

Live UV levels can be found at:

W www.arpana.gov.au

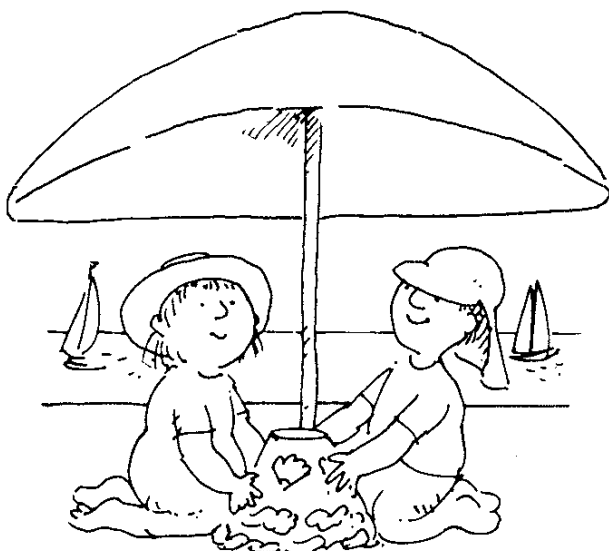
Key messages for parents and carers

Five steps to being SunSmart

Whenever the UV Index level reaches 3 and above, use a combination of these 5 sun protection steps:

1 SLIP on a shirt.

Wear clothing that covers as much skin as possible. Shirts that have collars and sleeves that cover the shoulders and are at least elbow length, and longer style shorts and skirts are



most suitable. Choose lightweight, close-weave, loose fitting clothing that won't make your child too hot.

2 SLOP on some sunscreen.

Apply a 30+ broad-spectrum, water-resistant sunscreen 20 minutes before going outside and reapply it every two hours. Sunscreen 'screens' out UV radiation but does not completely 'block' it out so some UV still reaches the skin. Sunscreen should never be the only method of sun protection nor should it be used to stay out in the sun longer. Always check the expiry date.

Test the sunscreen on a small area of the baby or toddler's skin before using it to make sure there won't be any reaction. Use a generous amount of sunscreen and pat it on, don't rub it in vigorously. The average-sized adult should apply at least a teaspoon of sunscreen to each arm, leg, front of body and back of body and at least ½ teaspoon to the face (including the ears and neck). That is, 35 ml of sunscreen for one full body application.

3 SLAP on a hat.

Wear a hat that provides good shade to the face, back of the neck, eyes and ears such as a broadbrimmed, legionnaire or bucket hat.

- Broadbrimmed hats should have a brim that is **at least 7.5 cm** wide. The brim width for children under 10 years of age should be suitable for the size of their head and ensure that their face is well shaded.
- Legionnaire-style hats should have a flap that covers the neck. The side flap and front peak should meet to protect the side of the face.

- Bucket or surfer-style hats should have a deep crown and sit low on the head. The angled brim should be **at least 6 cm** and provide the face, neck and ears with plenty of shade. The brim width on bucket hats for pre-school aged children should be suitable for the size of their head and shade their face well (minimum of 5 cm as a guide).

Baseball caps and visors offer little protection to the cheeks, ears and neck and are therefore **not** recommended.

When choosing a hat for young children consider the size and comfort, the amount of shade it provides and if it will obstruct vision or hearing. Many babies and toddlers do not like to wear hats. Persistence is needed to teach them that a hat is part of their outside routine.

For babies, choose a design such as a soft legionnaire hat that will crumple easily when they put their head down.

Hats that can be adjusted at the crown or can be tied at the front to help secure the hat on a child's head are best. If the hat is secured with a long strap and toggle, it may be best to place the strap at the back of their head or trim the length so it doesn't become a choking hazard.

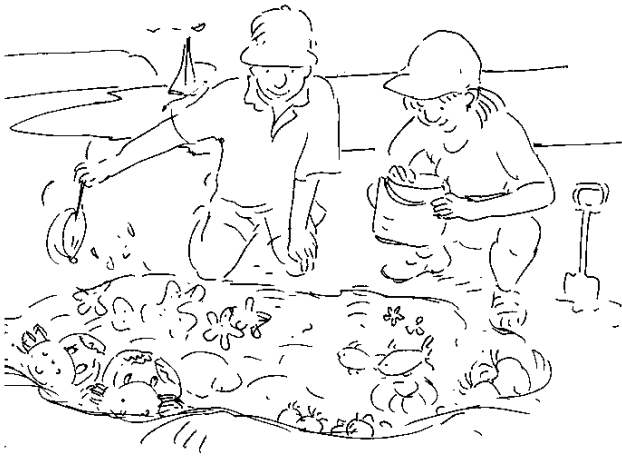
4 SEEK shade

Try to use shade whenever possible. Plant trees or erect temporary/permanent shade structures in the places where your child plays, or move activities, e.g. wading pools and play equipment, into shaded areas. Even while in the shade, UV radiation can be reflected and scattered so it is important that children continue to wear a hat, appropriate clothing and sunscreen.

5 SLIDE on some sunglasses.

Wear wrap-around sunglasses that meet the Australian Standard 1067 (Sunglasses – Category 2, 3 or 4). There are products available that have been specifically designed for babies and toddlers and have soft elastic to keep them in place. The colour or darkness of the lenses doesn't indicate the level of sun protection and you will need to check the label. If using sunglasses, look for glasses that:

- Are close fitting
- Wrap around and cover as much of the eye area as possible



- Are preferably marked EPF (eye protection factor) 10.

Some young children may be reluctant to wear sunglasses, but you can still help protect their eyes by wearing a hat and staying in the shade.

Vitamin D

Correct sun protection practices not only reduce a child's risk of skin and eye damage and skin cancer but also ensure they obtain enough vitamin D from the sun to allow for healthy bone development and maintenance.

Vitamin D forms in the skin when it is exposed to UV from sunlight. Vitamin D can also be obtained from some foods such as margarine and some dairy products fortified with vitamin D, as well as oily fish, eggs and liver. Vitamin D regulates calcium levels in the blood. It is also necessary for the development and maintenance of healthy bones, muscles and teeth.

In Victoria from September to April, most people receive enough vitamin D simply by going about their day-to-day activities. Generally a person only needs a few minutes of sun exposure to the face, arms and hands, or equivalent area of the skin, before 10 am or after 3 pm, on most days of the week. People with naturally very dark skin may need 3–6 times this exposure time.

From May to August in Victoria the UV Index is likely to be below 3 so sun protection isn't needed during these months unless you are in alpine regions or near highly reflective surfaces such as snow or water. Most people need about two to three hours of UV to the face,

arms and hands, or equivalent area of the skin, spread over a week to maintain adequate vitamin D levels. People with naturally very dark skin may need 3–6 times this exposure time.

For more information on skin types go to:

W www.sunsmart.com.au.

UV and your baby

A baby's skin is thinner than an adult's skin. It is extremely sensitive and can burn easily so sun protection is needed from the very beginning. It is recommended that you don't expose babies under 12 months to direct sunlight. If outdoors, babies need to be kept in the shade. Even when in the shade, use a combination of sun protection measures to minimise sun exposure.

Be a SunSmart role model

Children often copy those around them and learn by imitation. If you adopt sun protection behaviours the children in your care are more likely to do the same.

Common questions

When do we need to use sun protection?

To make sure children are well protected from UV radiation when it can damage the skin and eyes think: **From September, 5 things to remember! Slip** on a shirt, **slop** on sunscreen, **slap** on a hat, **seek** shade and **slide** on some sunglasses.

When average UV Index levels are low and sun protection isn't necessary (unless you're in an alpine area or near reflective surfaces like water) think: **From May, put sun hats away!**

I grew up playing in the sun. Now I hear it is wrong to let children play in the sun.

What's the truth?

Children should still be able to enjoy their favourite outdoor activities whilst staying safe in the sun. It's about being smart in the sun with your choice of clothing, hats, sunglasses and sunscreen, with the timing of activities outside peak UV radiation periods and by seeking shady environments.

Do children get skin cancer?

Skin cancer in children is very rare but there have been cases of skin cancer being diagnosed in children. Anyone can be at risk of developing skin cancer. The risk increases as a person gets older – older people have generally had more sun exposure than younger people. Research shows that sun exposure in the first 15 years of life contributes significantly to the lifetime risk of developing skin cancer. Melanoma is one of the most diagnosed cancers for 15–44 year olds.

Does being sunsmart prevent my family from getting enough vitamin D?

No – sensible sun protection does not put people at risk of vitamin D deficiency. In Victoria from September to April, most people receive enough vitamin D simply by going about their day-to-day activities, needing only a few minutes each day outside of peak UV periods. From May to August in Victoria most people need about two to three hours of UV to the face, arms and hands, or equivalent area of the skin, spread over a week to maintain adequate vitamin D levels. People with naturally very dark skin may need 3–6 times the exposure time all year round.

Do people with naturally very dark skin need to worry about sun exposure?

Yes – care still needs to be taken in the sun. Even though the incidence of skin cancers is much lower in naturally very dark-skinned people, skin cancers that do occur are often detected at a later, more dangerous, stage. People with these skin types do not normally need to apply sunscreen and can safely tolerate relatively high levels of UV radiation without getting burnt. To find out more about skin types go to:

W www.sunmart.com.au.

Regardless of skin colour, the risk of eye damage remains. According to the World Health Organization, sun exposure may be a factor in up to 20% of cataracts, especially in countries close to the equator, such as India, Pakistan and parts of Africa. High levels of UV radiation have also been linked to harmful effects on the immune system.

It is therefore recommended that all people, regardless of skin colour, wear a hat to protect their eyes and face.

What about naturally very dark skinned children at school and in care?

Children at school and care usually spend at least 60 minutes outdoors. It is important for children with naturally very dark skin to have some sun exposure during these periods. These children do not normally need to apply sunscreen because of the high level of protective melanin in their skin. This is a decision for their families to make. It is recommended that all children wear a hat to protect their eyes and face.

To me, my child looks and seems healthier with a suntan. Is this true?

A tan is a sign of overexposure to the sun's UV radiation and that damage has occurred. Continued exposure damages and weakens the skin and increases the risk of skin cancer.

Can I use sunscreen on my children?

Sunscreen screens out UV radiation but does not completely block it out. Some of the sun's UV radiation still gets through to the skin. Sunscreen should be applied to those areas of the body that can't be covered by clothing. The Australasian College of Dermatologists recommends the use of a sunscreen 'at any age when there is unavoidable exposure to the sun' and states sunscreen is safe to use on babies. However it is always best to keep babies and toddlers out of direct sun and well-protected using other forms of sun protection so that sunscreen use is minimal. Many brands of sunscreen include a formulation especially for infants which offers the same degree of protection, but is much gentler on their skin. Sunscreens with Titanium Dioxide or Zinc Oxide work largely by reflecting the ultraviolet radiation away from the skin, and are less likely to cause problems with sensitive skin.

Sunscreen tips

- Test the sunscreen on a small area of the baby or toddler's skin before using it to make sure there won't be any reaction.



- Use an SPF 30+ broad spectrum, water resistant sunscreen.
- Apply the sunscreen 20 minutes before going outside and reapply every two hours (even if the stated water resistance is longer than two hours).
- Always check the use-by date on sunscreen.
- Don't use sunscreen to extend time in the sun.
- Only use sunscreen with other forms of sun protection. It doesn't offer enough protection if it's used on its own.

Is it true that skin cancer is a worse problem now because of the hole in the Ozone layer?

There is a thin layer of ozone, made up of oxygen that surrounds the Earth. It acts as a shield, protecting the planet from the most dangerous types of UV radiation. Increases in skin cancer incidence observed in recent decades are probably related to changes in behaviour towards sun exposure rather than the increases in the amount of UV radiation due to ozone depletion. There may be an increase in skin cancers due to ozone depletion in the next fifty years or so but at this stage we are not certain about the effects of ozone depletion and any associated climate changes.

We do know that behaviour can have an impact on preventing skin cancer so it is important to use the five sun protection steps whenever UV levels reach 3 and above; clothing, hats, sunscreen, shade and sunglasses.

Activities for children

Making a SunSmart ad

Divide the children into groups and ask each to create a SunSmart ad. To prepare, they should first decide on their key messages and make sure the ad includes the five SunSmart steps. The ads could be performed live or filmed on video. Variations may include creating a radio ad or poster.

Silly Sausage Science Experiment

On a fine, warm, sunny day, try this experiment to explore protection from the sun. You will need: seven thick sausages, sunscreen, plastic food wrap or a piece of T-shirt fabric, newspaper, silver foil and cooking oil.

Sausage 1: Apply SPF 30+ broad spectrum sunscreen to one sausage.

Sausage 2: Apply a low factor sunscreen to one sausage.

Sausage 3: Apply cooking oil to one sausage.

Sausage 4: Wrap one sausage in plastic food wrap or a piece of T-shirt fabric.

Sausage 5: Wrap one sausage in newspaper.

Sausage 6: Wrap one sausage in silver foil.

Sausage 7: (Control sausage). Place a control sausage on a paper towel.

Place the sausages in full sun where they will not be disturbed for an hour. Remove the sausages and have the children write and draw about their observations. Encourage them to make their own conclusion about the link between sausage skin and their own skin and the effects of different or no coverings.

Designing/making a SunSmart hat

Ask the children to create their own SunSmart hats using art/technology materials.

Resources for teachers and carers

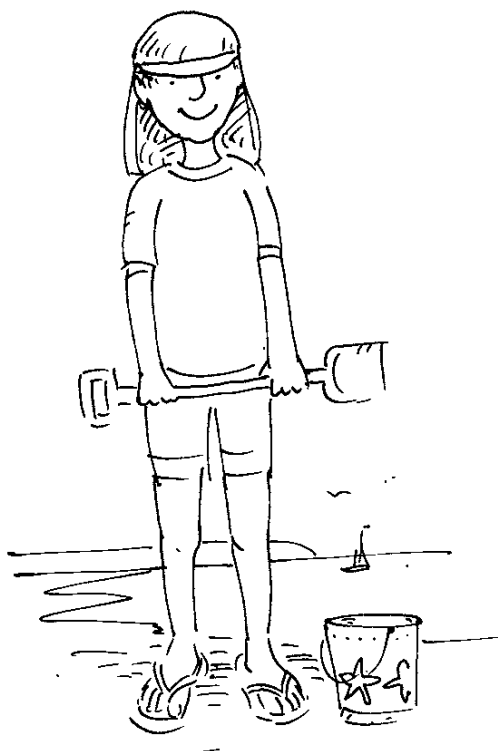
SunSmart has a number of useful resources available to help share our important sun protection message. These include teacher curriculum resources, posters, information sheets, flyers, student activity sheets and project pages, brochures and multi-lingual information sheets. A resource-listing is available on our website and resources can be ordered online:

W www.sunsmart.com.au

T (03) 9635 5148.

SunSmart Schools and Early Childhood Program

The SunSmart Schools and Early Childhood program is a voluntary membership program of the Cancer Council. Approximately 86% of primary schools and 68% of early childhood services across Victoria are registered members of the SunSmart program. This means they implement a comprehensive SunSmart policy that meets all current SunSmart recommendations. The policy documents how the school or service protects children and staff from too much UV exposure and skin cancer and also allows some safe sun exposure for vitamin D.



Does your child's school or early childhood service display a SunSmart sign?

SunSmart members have a metal SunSmart sign on their front fence to acknowledge their commitment to sun protection and following Cancer Council guidelines. To check if your child's school or service is a registered member of SunSmart or to find out further information about the program, how to join or renew your SunSmart policy or to organise for someone to speak with your teachers / carers, please contact:

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W www.SunSmart.com.au

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