Sunscreen

Key points

- Sunscreen protects against the damaging effects of the sun by reducing the amount of ultraviolet (UV) rays that reach the skin.
- Sunscreen DOES NOT provide 100% protection against UV radiation, so it should always be used with other sun protection methods.
- Cancer Council recommends using broad-spectrum, SPF30+, water-resistant sunscreen, and reapplying at least every two hours.

Australia has the highest rate of skin cancer in the world. Nearly all skin cancers are caused by ultraviolet (UV) radiation from the sun. Taking steps to reduce your exposure to UV radiation will reduce your risk of developing skin cancer.

Sunscreen reduces the amount of damaging UV radiation reaching your skin and the regular use of sunscreen can help reduce the risk of sunburn.

This information sheet answers some common questions about sunscreen.

What is the best way to protect my skin?

Always protect your skin when the UV Index is 3 (moderate) or above, which means it is strong enough to damage your skin. You can find the SunSmart UV Alert on the weather page of most Australian daily newspapers or go to **www.cancercouncil.com.au/sunsmart**

It is important to use a combination of methods to protect your skin from UV radiation as sunscreen on its own is not enough.

Take five steps to protect your skin:

- Slip on close-weave clothing that covers as much skin as possible.
- Slop on SPF30+, broad-spectrum, water-resistant sunscreen.
- Slap on a broad-brimmed hat that protects your face, ears and neck.
- Seek shade wherever possible.
- Slide on close-fitting sunglasses that meet the Australian Standard 1067.

How does sunscreen work?

Sunscreen works by filtering (not blocking) UV radiation with a chemical barrier that absorbs and/or reflects the UV rays away from your skin. No sunscreen provides 100% protection against UV radiation. Some UV radiation will always reach the skin, damaging the cells below. This damage builds up over time and can increase your risk of skin cancer.

What's in sunscreen?

Sunscreen contains chemicals to filter UV radiation, as well as other ingredients such as preservatives, moisturisers and fragrance.

There are two types of chemicals in sunscreen:

- **chemical filters,** which absorb UV radiation before it can damage the skin
- **physical filters,** which contain micro-fine particles that sit on the surface of the skin and act as a physical barrier.

Sunscreen can contain either chemical or physical filters, and many contain both. Chemicals in sunscreen are tested and approved as being safe, and there is no scientific evidence of health side effects from sunscreen.

What does 'broad-spectrum' mean?

UV radiation comes in different wavelengths, called UVA and UVB. Both UVA and UVB contribute to sunburn, skin ageing, eye damage, melanoma and other skin cancers. Broad-spectrum sunscreens filter out some UVA radiation as well as UVB.

What do the SPF numbers mean?

SPF stands for 'sun protection factor'. The SPF protects against UVB radiation. A sunscreen is given an SPF number (of between 4 and 30+) after strict laboratory testing. The higher the SPF number, the more protection the sunscreen provides against sunburn.

Can sunscreen cause skin allergies?

Allergic reactions to sunscreen are usually caused by perfumes and/or preservatives in the product, not the chemicals that filter UV radiation.

If you have an allergic reaction to a sunscreen, you should try another brand or speak to your doctor or chemist about choosing another product. Sunscreens that have titanium dioxide as the main agent are usually suitable for sensitive skin.

Some people are concerned that sunscreens may contain peanut or tree nut oil or para amino benzoic acid (PABA), which can cause allergic reactions. Cancer Council sunscreen does not contain PABA or peanut or any tree nut oil.

If you're concerned about allergies, contact the manufacturer about ingredients in the sunscreen you are planning to use. Current regulations only require that preservatives and active ingredients are listed on the label.

Should I use sunscreen on my baby or toddler?

There is no evidence that sunscreen harms babies, but it's best to protect your baby or toddler with hats and clothing and keep them in the shade. You can apply sunscreen to small exposed areas of the baby's skin that can't be covered with clothing. If your baby reacts to sunscreen, try another product or talk to your doctor.

How should I apply sunscreen?

Firstly, look at the label and always follow the manufacturer's instructions. Also, keep in mind:

- Sunscreen must be applied generously, rubbed in lightly and used with other forms of sun protection (shade, clothing, hats).
- Most people don't use enough sunscreen – remember to apply generously. Cancer Council recommends that adults use about a half teaspoon for the face, neck and ears, a teaspoon for each arm and leg, and a teaspoon each for the front and back of the body.
- Apply sunscreen 20 minutes before going outside to allow it to bind to your skin for maximum effectiveness, then reapply every two hours in case it has been wiped or washed off. Reapplying regularly also means you're more likely to cover any parts of the skin you may have missed.

Can I get sunburnt when using sunscreen?

Yes, you can still get sunburnt using sunscreen by:

- not using other sun protection measures (such as shade, clothing and hats)
- not reapplying sunscreen every two hours or when it has been washed or wiped off
- not using enough sunscreen
- using sunscreen that has expired or has been stored incorrectly (see below).

Do expensive sunscreens give the best protection?

Any SPF30+ broad-spectrum sunscreen, if applied correctly and purchased in Australia, will give good protection. To be sure your sunscreen will provide effective protection against UV radiation, always check the label to make sure that the product complies with the Australian Standard AS/NZS 2604:1998 and has an AUSTL number.

Does sunscreen prevent vitamin D production?

Sunscreen filters out most but not all UV radiation. Regular use of sunscreen when the UV Index is 3 or above does not greatly decrease vitamin D levels over time.

If you have any concerns about vitamin D, talk to your doctor.

Do 'natural' sunscreens work?

A number of sunscreen products are marketed as 'natural' or 'chemical free'. There is no scientific evidence that 'natural' sunscreen products are safer or more effective than sunscreen products that are not promoted as 'natural'. Always check the label to make sure that the product complies with the Australian Standard AS/NZS 2604:1998 and has an AUSTL number.

Is it okay to use sunscreen containing insect repellent?

Some sunscreens contain an insect repellent called DEET. The label should clearly say how much DEET is in the product. When using sunscreen containing DEET always follow the manufacturer's instructions. Speak to your doctor about using sunscreen containing DEET if you are pregnant or intend using it on young children.

Does sunscreen expire?

Sunscreen must be labelled with an expiry date and storage instructions. Sunscreen won't work as well if it has passed its use-by date, or has been stored incorrectly, such as in the car or next to the pool. It's best to store sunscreen out of the sun and at temperatures below 25°C.

Further Information

For more information please visit our website:
www.cancercouncil.com.au/sunsmart