Sunscreen

Research shows that sunscreen is effective in preventing skin cancer, including the most serious type, melanoma.

Make sunscreen application a regular part of your daily routine.

The sun’s ultraviolet (UV) radiation is the main cause of skin cancer.

Sun protection is recommended whenever the UV level reaches 3 or above.

Download the free SunSmart app or visit sunsmart.com.au to check what times you need to use sun protection each day.

During the sun protection times, protect yourself in five ways:

1. Slip on clothing that covers as much skin as possible.
2. Slop on SPF30 (or higher) broad-spectrum, water-resistant sunscreen 20 minutes before you go outdoors and re-apply every two hours.
3. Slap on a broad-brimmed hat that shades your face, head, neck and ears.
4. Seek shade.
5. Slide on sunglasses that meet the Australian Standard for UV protection.

How does sunscreen work?

UV radiation is invisible energy from the sun and the main cause of skin cancer. Sunscreen ingredients include:

- UV absorbers that absorb UV radiation
- UV reflectors that scatter UV radiation such as Zinc Oxide or Titanium Dioxide.

Some sunscreens use a combination of UV absorbers and UV reflectors.

What does ‘broad-spectrum’ mean?

There are different types of UV radiation. ‘Broad-spectrum sunscreen’ means that it protects against both UVA and UVB 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, blotchiness, sagging and roughening, and also contributes to skin cancer.

UVB radiation penetrates the top layer of skin and is the main cause of sunburn and skin cancer.

What is SPF?

SPF (Sun Protection Factor) relates to the amount of time it takes for redness to appear on the skin compared to when no product is used at all. The test is done in a laboratory.

The SPF rating indicates the amount of UVB radiation that potentially reaches the skin if the sunscreen is applied according to directions. For example, SPF30 is estimated to filter 96.7% of UVB radiation with 1/30th (3.3%) of UV reaching the skin. SPF50 is estimated to filter 98% of UVB radiation with 1/50th (2%) reaching the skin. Both can provide excellent protection if they are applied properly.

To meet the Australian Standard (AS/NZS 2604:2012) sunscreens listed as ‘broad-spectrum’ must have a minimum UVA protection of at least 1/3 of its SPF claim, so SPF30 sunscreen is estimated to filter 90% UVA radiation and SPF50+ sunscreen is estimated to filter 94% UVA radiation.

sunsmart.com.au
Applying sunscreen
It is recommended that sunscreen is used as part of your morning routine on days when the UV is forecast to reach 3 or above.

When heading outdoors, apply sunscreen 20 minutes before you go outside. Use a generous amount of sunscreen. The average-sized adult should apply at least a teaspoon of sunscreen to each arm, each leg, the front and back of the torso and one to the head and neck. That is at least seven teaspoons or 35 ml of sunscreen for one full body application, for an average-sized adult.

Many Australians apply too little sunscreen and forget to re-apply every two hours (even if the label states 4-hours water resistance) meaning they usually get less than half the SPF protection.

Sunscreen can be easily wiped off, lost through perspiration and is often applied unevenly. Applying more sunscreen every two hours helps keep you protected. Always reapply after swimming or water sports.

Sunscreen should never be used as the only form of sun protection or to extend time in the sun.

Which sunscreen should I use?
Choose a sunscreen that best suits your skin type, the activities you participate in, and that you find easy to reapply. Sunscreen can be bought as a cream, lotion, milk or gel. Cancer Council does not recommend aerosol sunscreen as it is very difficult to obtain the required amount of sunscreen necessary to get good UV protection.

Price is no indication of quality.
Make sure the sunscreen you choose is at least SPF30, broad-spectrum and water resistant.
Check the expiry date and look for the Australian Licence (Aust L) number on the package. The Aust L number indicates it has been approved by the Therapeutic Goods Administration (TGA).

If you have sensitive skin and have had a reaction to a sunscreen, try a fragrance-free or sensitive product. If you don’t want sunscreen residue to remain on your hands, a gel may work best for you.

Not all sunscreens contain the same ingredients. If you are concerned about reactions to sunscreen, Cancer Council recommends performing a usage test before applying a new sunscreen. Apply a small amount of the product on the inside of the forearm for a few days to check if the skin reacts, before applying it to other areas not protected by clothing.

While the usage test may show whether the skin is sensitive to an ingredient in the sunscreen, it may not always indicate an allergy. An allergy may occur after repeated use of the product. As with all products, use of any sunscreen should cease immediately and medical attention sought if any unusual reaction is observed. Professional assessment and testing by a dermatologist may be useful to identify the ingredient in the sunscreen that is causing the reaction.

Sunscreen and babies
The widespread use of sunscreen on babies under 6 months old is not recommended. Physical protection such as shade, clothing and broad-brimmed hats are the best sun protection measures. If babies are kept out of the sun or well protected from UV radiation by clothing, hats and shade, then sunscreen only needs to be used occasionally on very small areas.

In these cases, 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.
Sensitive and toddler sunscreens avoid using ingredients and preservatives that may cause reactions in young skin.
You could also ask your maternal and child health nurse, pharmacist or doctor for advice.
It is recommended you do a usage test on a small area of the child’s skin to check for any skin reactions to the sunscreen.
How long can you keep sunscreen?
Check the expiry date and storage conditions on the label. Most sunscreens have a shelf life of about three years. Sunscreen should be stored below 30°C. If left in excessive heat (e.g. in the glove box of a hot car or in the sun on the beach), over time, the product may not be effective.

Is sunscreen safe to use?
Sunscreens are regulated in Australia by the TGA to ensure they are safe and effective. As a therapeutic product, sunscreen must be used as directed to help provide effective protection from UV. Always use sunscreen with other sun protection measures (hat, clothing, shade and sunglasses).

There is clear evidence that regular use of sunscreen helps to prevent skin cancer. Long-term studies of sunscreen use in Australia have found no harmful effects of regular use.

More information and resources
For more information, visit sunsmart.com.au or contact Cancer Council on 13 11 20.

For more information about how to protect your skin, visit sunsmart.com.au/protect-your-skin

Certain health conditions and medications mean some people are more sensitive to UV radiation and always need to use sun protection regardless of the UV levels. For more information, visit sunsmart.com.au/skin-cancer/risk-factors-for-skin-cancer.

Last updated: July 2022