



## Summer

PHARMACY ASSISTANT INFORMATION

Sun protection | Bites and stings |  
Travel health



"Are you sure you don't want  
to use my bug spray?"

## Sun protection

### WHY IS SUNBURN DANGEROUS?

Sunburn is the skin's reaction to the ultraviolet (UV) radiation from the sun. You can see sunlight and feel heat (infrared radiation), but you can't see or feel UV radiation. It can damage your skin even on cool, cloudy days.

Sunburn is a radiation burn to the skin. The signs of sunburn can start to appear in less than 15 minutes and skin can turn red within two to six hours of being burnt. It will continue to develop for the next 24 to 72 hours and, depending on the severity, can take days or weeks to heal. Sunburn will become worse with more exposure to UV rays. Mild sunburn can be treated at home, but severe and blistered sunburn requires prompt medical attention.

UVA and UVB radiation are both involved in sunburn, but skin reacts differently to each type of radiation:

- **UVA** – penetrates into the deeper skin layers and damages the sites where new skin cells are generated. Too much UVA radiation leads to roughening, dryness, blotchiness, wrinkling and sagging of the skin. High doses of UVA radiation can also cause sunburn, damage to genes in skin cells and skin cancer.
- **UVB** – is even more dangerous than UVA radiation, causing tanning, burning, ageing, skin damage and significantly promoting the development of skin cancer. It affects the surface skin layer. The skin responds by releasing chemicals that dilate blood vessels. This causes fluid leakage and inflammation – better known as sunburn.

The long-term effects of repeated bouts of sunburn include premature wrinkling and an increased risk of skin cancer, including melanoma (the most dangerous type of skin cancer). Once DNA damage occurs, it is impossible to reverse. This is why prevention is much better than cure.

### SYMPTOMS

The symptoms of sunburn include:

- changes in skin colour, ranging from pink to red and even purple
- skin that feels hot to the touch
- pain and/or itching
- swelling
- fluid-filled blisters that may itch and eventually pop or break
- broken blisters that peel to reveal even more tender skin beneath.

Sunburnt skin will change colour within two to six hours of being burnt and the colour change will continue to develop for up to seventy-two hours.

## LIFESTYLE ADJUSTMENTS TO AVOID GETTING SUNBURN<sup>1</sup>

Suggestions on how to avoid getting sunburnt include:

- Don't assume that sun exposure is safe when you can't feel it sting your skin – that sting or bite is heat, not UV radiation. If you're not sure, don't chance it – check the sun protection times for your location.
- UV radiation levels aren't linked to temperature. Don't rely on the temperature to gauge when you need sun protection. Check the sun protection times each day and Slip! Slop! Slap! Seek! and Slide!

During the daily sun protection times, use a combination of five sun protection measures to reduce your risk of sunburn.

- **Slip** – on sun-protective clothing (make sure it covers as much skin as possible).
- **Slop** – on SPF (sun protection factor) 50. Apply 20 minutes before going outdoors and reapply every two hours.
- **Slap** – on a broad-brimmed hat that protects your face, head, neck and ears.
- **Seek** – shade.
- **Slide** – on wrap-around sunglasses (make sure they meet Australian Standard AS/NZS 1067).
- Many Australians get sunburnt around water, at the beach or the pool. If there is no shade, you'll need to protect yourself in other ways.
- You can get sunburnt when you're relaxing and taking it easy, such as watching outdoor sports, picnicking at the park or while playing sports. Remember reflected radiation danger.
- Winter activities, such as snow skiing and snowboarding pose a high risk of sunburn because UV radiation is already higher in alpine regions than at sea level. Snow is also very efficient at reflecting UV radiation.
- What many people assume is 'windburn' is actually sunburn. While wind can dry the skin, it doesn't burn.
- A tan doesn't protect against skin and eye damage, or the risk of skin cancer.
- Babies under 12 months should not be exposed to direct UV and should be well protected from the sun. Always try to keep babies and children in the shade and use clothing to cover most of their body. Use small amounts of child-friendly sunscreen on uncovered areas such as the face and hands whenever children are exposed to the sun.
- It is a myth that using a solarium is a safe way to tan. Solarium tans offer no protection against genetic damage to skin cells, which can occur without burning.

## TREATMENT OPTIONS<sup>1</sup>

There is no cure for the symptoms of sunburn except time and patience. Treatment aims to help manage the symptoms while the body heals. Suggestions include:

- Drink plenty of water, because spending time in the sun can lead to dehydration as well as sunburn.

- Gently apply cool or cold compresses or bathe the area in cool water.
- Avoid using soap as this may irritate your skin.
- Speak to a pharmacist about products that help soothe sunburn. Choose spray-on solutions rather than creams which require rubbing in by hand.
- Hydrocortisone cream may help to reduce inflammation and itching.<sup>2</sup>
- Don't pop blisters. Consider covering itchy blisters with a wound dressing to reduce the risk of infection.
- If your skin is not too painful, apply moisturiser. This won't stop the burnt skin from peeling off, but it will help boost the moisture content of the skin beneath. Do not apply butter to sunburnt skin.
- Take over-the-counter pain-relieving medication, if necessary.
- Keep out of the sun until your skin has completely healed.

## Peeling sunburnt skin

There's no cream or lotion that will stop burnt skin from peeling off. This is part of the natural healing process. When skin is peeling:

- Resist the temptation and don't pick at the skin. Allow the dead skin sheets to detach on their own.
- Remove detached skin carefully and slowly. Don't rip skin sheets off or you risk removing more skin than you intended.
- Apply antiseptic cream to the newly revealed skin to reduce the risk of infection.

## Treatment for severe sunburn

See a doctor or seek treatment from the nearest hospital emergency department if you experience:

- severe sunburn with extensive blistering and pain
- sunburn over a large area of skin
- headache
- nausea and vomiting
- fever
- dizziness, confusion or altered states of consciousness.

## Getting your skin checked

Most skin cancers that are diagnosed and treated early can be cured. Get to know your own skin well. Learn what is normal for you and be alert to any new or changing moles, freckles and spots. If you notice anything new or different, it's important to seek medical advice as soon as possible.<sup>3</sup>

## Advice on applying sunscreen<sup>4</sup>

We can add value to a customer's sunscreen purchase this summer by being knowledgeable and advising on sunscreen application.

**They won't get advice in the supermarket - be the difference!**

Download a [sunscreen information sheet from Sunsmart](#)

When using sunscreen, remember:

- No sunscreen provides full protection so never rely on sunscreen alone for sun protection. During the daily sun protection times (when the UV Index is 3 and above), combine sunscreen with sun-protective clothing, a broad-brimmed hat that protects the face, head, neck and ears, shade and sunglasses.
- Apply sunscreen 20 minutes before you go outside and again every two hours (whether or not the label tells you to do this).
- Use a generous amount of sunscreen. The average-sized adult should apply more than half a teaspoon of sunscreen (about 3 ml) to each arm and the face/neck (including ears), and just over one teaspoon (6 ml) to each leg, the front of the body and the back of the body. That is, approximately 35 ml of sunscreen for one full body application.
- Check and follow the 'use by' date stated on the packaging and store sunscreen below 30°C.
- If you have an allergic reaction to a sunscreen, try another brand or look for a fragrance-free product such as a toddler or sensitive sunscreen. Pharmacists can offer advice about choosing an alternative.

## SUNSCREEN AND NANOPARTICLES

Nanotechnology has been used in sunscreens for many years. To date, the Cancer Council's assessment, drawing on the best available evidence, is that nanoparticulates used in sunscreens do not pose a risk. However, they continue to monitor research and welcome any new research that sheds more light on this topic.

Sunscreen formulas and their components are regulated through the Therapeutic Goods Administration (TGA). In early 2009, the TGA conducted an updated review of the scientific literature in relation to the use of nanoparticulate zinc oxide and titanium dioxide in sunscreens.

The TGA provides consumer information on sunscreens [here](#).

1. <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/sunburn>
- 2 <https://www.medicalnewstoday.com/articles/176441.php>
3. <https://www.cancercouncil.com.au/cancer-prevention/sun-protection/>
4. <http://www.sunsmart.com.au/uv-sun-protection/slop-on-sunscreen>

## Bites and stings

We can add value to customers seeking help for bites and stings by being knowledgeable and providing the right, practical advice.

### BLUEBOTTLE STINGS

Bluebottle stings are the most common jellyfish stings in Australia.

If stung wash any remaining tentacles off the skin with seawater, or carefully pick them off the skin (wearing gloves if possible).



Vinegar is no longer the recommended treatment for a bluebottle sting. Instead, immerse the person's sting in hot water (no hotter than can be easily tolerated) for at least 20 minutes. You can even run a hot shower over the affected area if that's easier.

If you can't access hot water, apply an ice pack or cold water to the affected area.

Seek medical attention if the person develops further symptoms such as abdominal pain, nausea and vomiting, or if there is continuing pain, itchiness or blistering at the site.

Never rub sand or pour soft drink over any jellyfish sting or urinate on the stung area.

### BEE STINGS, WASP STINGS AND ANT BITES

Bee and wasp stings and Australian Jack Jumper ant bites are the most common triggers of anaphylaxis (see below) to insect stings.

Wasps are generally more aggressive than bees and are attracted to food and sugary drinks. Check open food and drink containers when you are outdoors before you eat or drink from them.



Take these steps if you are stung by a bee:

- Do not use tweezers to remove the sting. Bees leave behind a sack of venom, and if you try to use tweezers you will release more venom from the sack;
- if the stinger is still in the skin, gently try to remove it by scraping it carefully from the side with the edge of a firm object, such as a finger nail or credit card;
- when you have removed the sting, wash the affected area with soap and water, and dry the area gently.

If the pain is persistent (ongoing), massage the area around the sting or bite for 10 minutes using an ice-pack. This will only provide temporary pain relief.

## TICKS

Ticks can attach to your skin when you're out and about in the bush.

To protect yourself from ticks, wear light coloured clothing, tuck your trousers into your socks and spray an insect repellent containing diethyltoluamide (DEET) or picaridin onto your skin, shoes and socks.



After returning from a tick area, thoroughly check the whole body of all members of the party (especially children) for ticks. Pay particular attention to the back of the head and neck, groin, armpits and back of the knees. You can have more than one tick.

To remove a tick, grasp it as close to the skin as possible with fine tipped tweezers. Gently pull the tick straight out using steady pressure. A portion of the head or mouthparts may be left behind. These will fall out in time. There are specific tick removal devices available.

### DO NOT:

- grasp the tick by the body,
- apply methylated spirits or fingernail polish, or
- use a lighted match, or cigarette.

Once the tick is out, apply antiseptic cream to the bite site. Tick bites can remain slightly itchy for several weeks.

If the tick isn't fully removed, you should look out for signs of infection – redness, pain around the wound site, pus or clear liquid coming from the wound, and a high temperature over 38°C.

See your doctor if you develop a reaction around the bite site, or if you feel generally unwell or experience muscle weakness or paralysis after a tick bite.

## MOSQUITO BITES

Mosquitoes cause itchy bites, but severe allergic reactions are rare. Some types of mosquitoes can spread serious diseases.

See your doctor if you develop a rash, flu-like symptom such as fever, chills, headaches, joint and muscle pains (swelling or stiffness), fatigue, depression and generally feel unwell.



Most mosquito bites can be managed by washing the area with soap and water and applying an antiseptic. Cold packs may help with local pain and swelling.

To lessen your chance of being bitten by mosquitoes (and midges), cover up as much skin as possible and stay inside in the early morning or at dusk. Use an insect repellent when you are out and about and there are mosquitoes around.

5. <https://www.healthdirect.gov.au/bites-and-stings>

## ANAPHYLAXIS

Cases of severe allergic reactions to triggers, for example food or bites and stings, can lead to anaphylaxis. Anaphylaxis is very serious and can be fatal.

If you think someone is having an allergic reaction, call triple zero (000).

Symptoms of anaphylaxis may include:

- difficult or noisy breathing
- difficulty talking and/or hoarse voice
- a swollen tongue
- persistent dizziness or collapse
- swelling or tightness in the throat
- pale and floppy (young children)
- wheeze or persistent cough

### First aid for anaphylaxis

1. Lay person flat and keep them still – don't let them stand or walk.
2. If unconscious, place them in the recovery position.
3. If breathing is difficult allow them to sit.
4. Give adrenaline autoinjector.
5. Phone ambulance on triple zero (000).
6. Further adrenaline doses may be given if no response after 5 minutes.
7. Transfer person to hospital for at least 4 hours of observation.

If the person is unresponsive and not breathing normally, start CPR.

If you aren't sure – always give the adrenaline autoinjector. If the person also has asthma, give the adrenaline autoinjector first and then asthma reliever puffer.

6. <https://www.healthdirect.gov.au/anaphylaxis>

## Travel health

### ADVICE FOR TRAVELLERS:

Before you leave, it is important to research every country you will visit, and to get advice that is tailored to your health needs. The risk of acquiring an infection and the appropriate preventative measures can be different for older travellers, children, pregnant women or those with underlying chronic diseases.

While you are away, there are some things you need to keep in mind to prevent illness, like preventing insect bites and being careful of what you eat and drink.

When you return, keep an eye on your health. Some diseases may not become apparent until you have returned home and could spread to your loved ones.

Information on the health risks associated with many destinations can be found online at:

- [Smartraveller](#)
- [World Health Organization](#)
- <http://www.traveldoctor.com.au/Content/Knowledge-Hub/Destination-fact-sheets>

Many diseases, which pose a risk to travellers, can be prevented by immunisation.

Pharmacists can advise of any vaccines or boosters that may be needed, and a doctor's appointment may be necessary to prescribe the required medicine.

### PHARMACY SUPPLIES FOR TRAVELLERS:

We recommend the following pharmacy essentials in a traveller's kit – The traveller's needs will vary depending upon their destination(s), health status and demographics:

- Immunisations e.g. flu vaccine
- Adequate supply of current prescription medicines
- Motion sickness
- Insect repellants
- Water purifier tablets
- Anti-diarrhoeal medicine and electrolyte replacements
- Cold and flu medicine
- Antihistamines for allergic reactions
- Anti-itch cream
- Anti-bacterial cream/ointment/solution
- Anti-fungal cream (with 1% hydrocortisone)
- Disposable gloves
- Sunscreen
- Travel stockings
- First aid kit
- Condoms
- Hand sanitizer
- Ear planes ear plugs
- Pain relief medicine

## Marketing ideas

- Enable all pharmacy assistants access this information pack and discuss at a staff meeting.
- Role plays of scenarios is an excellent way for team members to become confident and proficient in providing customer service to a level that ensures best patient outcomes.
- Obtain posters and other display material from supplier representatives - create a display
- Make sure the Sun care, First Aid, Digestive and Travel health sections are well stocked, ticketed and laid out.
- Many pharmacies reduce Sun care shelf space over winter, so ensure that the Sun care section has appropriate shelf space as the season changes.
- Ensure the Health Information Brochures for Sun care, Bites and stings and Vomiting and diarrhoea are well stocked and correctly positioned on shelf.

