

## SUN PROTECTION

Summer is nearly here and out will come the swimsuits, the shorts, the bikini's and lots of exposure to the sun for our skin! As the slogan so famously says "Slip, Slop, Slap, Seek, Slide" because overexposure to harmful sunlight effects should be prevented. It is a great adage, slip on a shirt, slop on sunscreen, slap on a hat, seek shade and slide on some sunglasses, so I thought a recap on the simple precautions needed to keep us all safe were in order:



### Dangers of UV rays include:

Short-term risks of excess sun exposure are sunburn and possibly snow blindness.

Longer-term risks (over decades) include:

- **Actinic (solar) keratoses:** rough and scaly pre-cancerous spots on the skin
- **Premature ageing** of the skin and wrinkling
- **Skin cancer:** The rise in the incidence of skin cancers is strongly related to increasingly popular outdoor activities and recreational exposure. It is believed that 4 out of 5 cases of skin cancer could be prevented
- **Eye problems:** UV light exposure raises the risks of eye diseases, including cataracts, cancers and eye growths (pterygium) and macular degeneration. Strong, swift exposure to light reflection can also cause painful damage called snow blindness.

### Who is at Risk?

Literally, everyone who is exposed to UV light is at risk. Although some people are more vulnerable than others. These include those with:

- Pale, white or light brown skin
- Freckles, red or fair hair
- A tendency to burn rather than tan
- Many moles
- Skin problems relating to a medical condition
- Occasional intense exposure
- A family history of skin cancer



In addition to the above personal issues, other factors increase risk:

- Spending a lot of time outside!
- Exposure to snow, sand, concrete and water as these reflect the sun's rays: about 75% of harmful rays are reflected from snow, 15% from sand, 10% from concrete and 5-10% from water (depending on how choppy it is).
- Higher altitude.

## PROBLEM PREVENTION

Simple measures work!

Most importantly, it is easy to underestimate sun exposure as symptoms do not usually develop for several hours. Breezes and getting wet, cool the skin at the time leading to a false sense of wellbeing.



**Do not forget that sun damage still occurs in cloudy and cool conditions.** 30-40% of UV penetrates cloud.

**Limit time in the sun**

The sun's UV rays are the strongest between about 10.00 to 16.00. As much as possible, limit exposure during these hours.

**UV Index**

The UV Index is a useful tool that informs how strong the sun's UV rays are and therefore the risk of burning. The higher the value, the greater the risk of sun damage and the less time it takes.



It varies depending on world location, time of year, the weather, time of day and altitude above sea level. The UV index is not always highest when it is hottest.

**Skin Type**

By knowing your own skin type and using the UV index, sun protection requirements can be calculated.

Experts have identified 6 different skin types (colour and tone vary a lot within each skin type, but it is a useful guide.)

Type I	Often burns, rarely tans. Tends to have freckles, red or fair hair, blue or green eyes.
Type II	Usually burns, sometimes tans. Tends to have light hair, blue or brown eyes.
Type III	Sometimes burns, usually tans. Tends to have brown hair and eyes.
Type IV	Rarely burns, often tans. Tends to have dark brown eyes and hair.
Type V	Naturally brown skin. Often has dark brown eyes and hair.
Type VI	Naturally black-brown skin. Usually has black-brown eyes and hair.

The below table of different skin types and the UV index, gives an indication of the risk of burning.

		Skin Type			
		I and II	III and IV	V	VI
UV Index	1 2	low	low	low	low
	3 4	medium	low	low	low
	5	high	medium	low	low
	6	high	medium	medium	low
	7 8 9	very high	high	medium	medium
	10	very high	high	high	medium

**THE SHADOW RULE:** This is a simple tip which is useful especially when the UV index is not available. It does not reflect skin type or individual risk.

Just look at your shadow - if it is shorter than your height, it means the sun's UV rays are strong. Protection is advised.

**Shade**

Seek shade when UV rays are the most intense. But remember that shade structures such as trees, umbrellas etc do not offer complete sun protection.

**Wear protective clothing**

A wide brim hat offers good sun protection for eyes, ears, face and the back of the neck. Tightly woven, loose fitting clothes will provide additional protection from the sun. Suitable clothing includes:



- A wide-brimmed hat that shades the face, neck and ears, a long-sleeved top, trousers or long skirts in close-weave fabrics that do not allow sunlight through
- Sunglasses with wraparound lenses or wide arms with the CE Mark and European Standard EN 1836:2005 or UV400 provide the best protection. These sunglasses can provide 99 to 100 percent UV-A and UV-B protection and will greatly reduce eye damage.
- Also, UV blocking contact lenses exist.

**Use sunscreen**

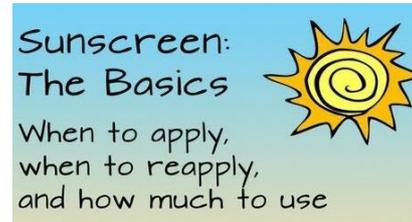
SPF 30 is recommended by the British Association of Dermatologists. Other counties recommend at least SPF 15. These protect against UVB (and UVA).

Apply liberally and re-apply at least every two hours or after working, swimming, playing or exercising outdoors. All exposed skin should be covered, including face, neck and ears (and head in those with thinning or no hair), feet and toes etc



Most people do not apply enough sunscreen. The amount needed for the body of an average adult to achieve sun protection factor (SPF) is around 35ml or 6 to 8 teaspoons of lotion. If sunscreen is applied too thinly, it provides less protection.

**Remember**, the appropriate volume of sunscreen needs to be applied twice: 30 minutes before going out and just before going out.



Water-resistant sunscreen is required if sweating or water contact is likely.

Sun cream has a shelf life of two to three years, only if stored away from high temperatures or direct sunlight. Therefore, store as per manufacturer's instructions.

Check the bottle for an expiry date. Never use sun cream after the use-by date, because protection is much reduced.

## SUNBURN TREATMENT

### Home Treatment

Cool the skin by sponging with cool water, having a cool bath or shower. A cold flannel to the affected area may also help.

Drink plenty of fluids to cool down the whole body and prevent dehydration.

Apply a water-based emollient (eg E45) or petroleum jelly (eg Vaseline) to keep the skin cool and moist.

Take painkillers eg paracetamol or anti-inflammatories eg ibuprofen, to relieve any pain (aspirin should not be given to children under 16.)

Avoid all sunlight, including through windows, by covering up the affected areas of skin until fully healed.

### When to seek Medical Advice

There are 3 occasions when medical advice should be immediately sought:

1. If a baby, young child or elderly person has the "usual, red" sunburn, as their skin is fragile and dehydration can be swift
2. If the area burned is large (the hand area of the patient is approximately 1% of their body area)
3. If the adult feels generally unwell, as this can be a sign of a severe burn:
  - blistering or swelling of the skin (oedema)
  - chills alternating with a high temperature (fever) of 38C (100.4F) or above, or 37.5C (99.5F)
  - dizziness, headaches and feeling sick (symptoms of heat exhaustion)



The doctor may recommend using hydrocortisone cream for a few days to reduce the inflammation of the skin. Severe sunburn may require special burn creams and dressings. Very occasionally, hospital treatment may be needed.