

## Sunscreens

Sunscreens should be used where there is the potential for skin to be over exposed to the sun. Sunscreens should not be the first choice of protection and should always be used in conjunction with other forms of sun protection:

- Seek shade and avoid peak ultraviolet (UV) radiation times between 11am to 3pm;
- Use clothing and hats to provide personal shade.

## Why use sunscreen?

In Northern Ireland approximately 2,500 people develop skin cancer each year and around 45 people die. The majority of skin cancers are caused by over exposure to UV radiation. UV radiation also causes skin damage, ageing, wrinkling and eye damage.

The best way to prevent skin cancer is to avoid over exposure to the sun when UV radiation is high (11am to 3pm). Sunscreen should be used in addition to the other protective measures.

## How sunscreen works?

Sunscreens filter out the UV radiation before it penetrates the skin by means of a chemical barrier. Depending on the active chemicals in the sunscreen UV radiation is reflected off the skin or the radiation is absorbed by the chemicals. Sunscreens do not provide 100% protection from the sun, they are not a block and a small amount of UV radiation still reaches the skin.

## What's in a sunscreen?

Sunscreens are available, as creams, gels or lotions. Choose the sunscreen that best suits your skin type and your activity. Alcohol-based sunscreens may be better for physical activity as they tend to dry more quickly and allow for perspiring. They may however sting the skin and be unsuitable for sensitive skins.

Sunscreens contain different ingredients. Should your skin be sensitive to one product check with the pharmacist or doctor about choosing another. A wide range of sunscreens are available for sensitive skins and those developed for children are usually also formulated for sensitive skins.

The long-term effects of daily use of sunscreens are as yet unknown as they have been in use less than a lifetime. We do know that over exposure of skin to the sun poses a considerable health risk. The health benefits to be gained from using a sunscreen (in conjunction with clothing and shade) during high UV radiation times considerably outweighs the problems that sunscreen might cause. As a general rule clothing and shade are the preferable options.

## Sunscreen and babies?

There is no evidence that sunscreen is harmful to babies. Baby's skin is however very sensitive and it is preferable to use clothing, hats and shade to prevent over exposure to UV radiation. Sunscreen need only be used occasionally on very small areas of the baby's skin.

## SPF numbers

SPF stands for 'sun protection factor' and refers to the sunscreen's ability to filter out ultraviolet B radiation (UVB). SPF is a ratio worked out in the laboratory by measuring the increased amount of UVB radiation necessary to cause redness of the skin when the product is applied at a specified thickness compared to when it is not used.

SPF provides a guide to relative strength. How long it will take for an individual to burn depends on skin type, time of day, time of year, surface reflection and cloud cover. It is almost impossible to calculate all these factors in everyday situations.

## Applying sunscreen

Sunscreen should be applied generously and rubbed in lightly. Most people apply too little sunscreen resulting in 50 - 80% less protection than specified on the bottle.

Correct application of the product will affect the level of protection. Sunscreen should be applied 20 minutes before going out in the sun to allow the sunscreen to bind to the skin for maximum effectiveness. It should be reapplied every 2 hours or more frequently if it is rubbed off, for example perspiring. A second application of sunscreen applied after the first coat has dried helps to avoid missing areas of the skin.

## Broad-spectrum

Ultraviolet radiation from the sun comes in different forms. The two known to be associated with skin cancers are UVA and UVB. A broad-spectrum sunscreen filters out both UVA and UVB radiation. SPF numbers refer to filtering out UVB only. Always choose a broad-spectrum sunscreen.

## Star ratings

Star ratings may be used to indicate the level of UVA filters within the sunscreen. A rating of three stars or greater is recommended.

## Expense

Price is not an automatic indication of quality, all sunscreens must be tested to a regulated standard of effectiveness and SPF, broad-spectrum and star ratings, indicates this. Some less expensive sunscreens may be less pleasant to apply or less cosmetically acceptable - check with the pharmacist for these qualities.

## Shelf life

All sunscreens should show an expiry date and storage conditions. Most sunscreens can last for two to three years when stored correctly. Sunscreens vary in their ability to withstand heat and may more quickly deteriorate if kept in a hot car.