

## Ultraviolet Radiation and Skin Cancer

In Northern Ireland each year 2,500 people are diagnosed with skin cancer and 45 people die of this disease. Our rates of skin cancer are increasing and this trend looks set to continue.

Skin cancer is mostly caused by overexposure to ultraviolet radiation (UV) radiation. UV radiation comes directly from the sun, but is also scattered and reflected by surfaces such as buildings, concrete, sand, snow and water. UV radiation is invisible, it is not warm and can pass through light cloud, so sunburn can occur on cool, lightly overcast days. UV radiation is most intense in Northern Ireland between May to the end of August from 11am - 3pm.

People of all skin types and of all ages need to protect their skin from the sun to reduce the risk of skin cancer. Some skin types are at more risk of sun damage than others, individuals with fair skin have very little natural protection and must take extra care in the sun. Protecting children and teenagers is particularly important. They have very sensitive skin and the more sun exposure in childhood, the greater the risk developing skin cancer in later life. The earlier skin cancer is detected and treated the better the outcome. Therefore it is important to check skin regularly for suspected skin cancers.

## Spend Less Time in the Sun

Spend less time in direct sunlight when UV radiation is most intense 11am - 3pm. Plan outdoor activities outside these hours if possible.

## More Use of Shade

When outdoors, try to stay in the shade. If there is no natural shade, take portable shade such as a sun canopy or an umbrella. Remember, even in the shade, UV radiation can reflect from surfaces such as water, sand and concrete. For best protection, choose shade that has extensive overhead or side cover and is away from highly reflective surfaces.

## Wear Protective Clothing and Hats

Wear clothing that protects the neck, arms and legs, and a hat or scarf to cover the head and ears and to shade the face. Some clothing is now labelled - UPF (ultraviolet protection factor) choose clothing made of fabric rated above 30. Loose fitting, closely woven fabrics provide the best protection and are cool when the weather is hot.

## Wear Sunglasses

Sunglasses reduce the risk of short term damage and irritation to eyes from UV radiation, as well as long-term diseases such as cataracts. Sunglasses marked with the British Standard mark offer the best protection. The British Standard only measures how much UV radiation is transmitted through the lens, so choose fitting, wrap-around glasses to prevent UV radiation leaking in from the sides.

## Apply Sunscreen

Sunscreen works by filtering out UV radiation before it penetrates the skin. The SPF (sun protection factor) rating of a sunscreen cannot readily be translated into the 'strength' of a product. How long a person will take to burn depends on the time of day, the time of the year, the amount of reflected UV radiation, how cloudy it is and their skin type.

Because sunscreen cannot completely shield the skin from UV radiation, it should not be considered the first choice for skin protection. Nor should it be used as a means of extending time in the sun. SPF 15 or greater, broad spectrum with a 3 star rating or greater, water resistant sunscreen offers the best protection.

Apply sunscreen generously - one teaspoonful for the face, neck and ears and one teaspoonful for each arm or lower leg not covered by clothing. Apply 20 minutes before going outdoors and reapply every two hours or more often if it has been wiped, rubbed or sweated off. Always check the product labelling and follow the directions.

## Substances that Increase Sensitivity to UV Radiation

A number of medications can increase susceptibility to skin damage from UV radiation. These include some antibiotics, drugs for high blood pressure, antidepressants, some medication for skin conditions, drugs that suppress the immune system (as used after organ transplants) and non-steroidal anti-inflammatories. Check with a doctor about prescribed medicines, and take extra sun protection precautions if taking such medication.

Some people develop photosensitivity to UV radiation as a result of contact with certain substances such as coal tar, dyes, chlorinated hydrocarbons and some plants. Photosensitivity is an abnormal reaction in the skin or eyes and extra precautions should be taken if exposure to these substances is a possibility.

## Checking for Skin Cancer

Checking skin regularly can help detect any new or unusual spots that may be skin cancers. Check the whole body as skin cancer can occur in places not normally exposed to the sun. Be on the look out for any new spots, or existing spots that have changed colour, size or shape. A skin cancer may be a spot that bleeds easily, never heals properly or is always itchy.

If an unusual spot is identified or change in an existing spot is noticed, show this to a doctor. Almost all skin cancers can be treated successfully if noticed early. Ignoring a strange looking spot can be dangerous as most skin cancers continue to grow if left untreated.