



Skin cancer Factsheet

Sun fun with care

Moderate exposure to the sun can be beneficial – psychologically it can make us feel good and physically it boosts blood circulation and stimulates the body's production of Vitamin D. The "lobster" look of sunburnt bodies is not attractive and can be very sore. All this does is cause damage to the skin which can lead to the development of cancers at a later date.

This fact sheet aims to give you an insight into some of the facts about skin cancer and gives guidelines on how we can enjoy the good weather but still protect our skin (see – How to be SunSmart Pg 3.)



The sun and you

Your risk of developing skin cancer depends on your skin type. Nobody's skin is completely safe in the sun but some skin types are more vulnerable than others. People most at risk of skin cancer are those with large numbers of moles on fair or freckled skin, and particularly those with light coloured eyes and fair or red hair. People with this skin type also tend to burn before they tan. People with dark skin that tans easily are less at risk. People with black, Asian and Mediterranean complexions are least at risk.

What causes skin cancer?

Most skin cancers are linked to sunburn or prolonged exposure to the sun. Skin cells are damaged by the electromagnetic radiation that makes up sunshine (this is different from the radiation associated with nuclear energy.) The dangerous rays contain ultraviolet radiation and can penetrate deep into our cells and cause gene damage, the trigger for cancer. UVR is most dangerous the closer you are to the equator because it is the closest point to the sun. The sun's rays are also more intense at high altitudes, like ski slopes, where there is less atmosphere to screen out the harmful rays.

Ultraviolet radiation comes in three types: UVA, UVB and UVC

UVA is the predominant type of UV radiation from the sun. It causes more pigment to be produced in the skin, resulting in a temporary tan. UVA doesn't burn the skin but can penetrate the outer layer and do damage under the surface. Long term exposure can lead to skin cancer. Sunbeds emit UVA radiation.

UVB radiation makes up a small proportion of the sun's UV radiation. But it can cause redness and burning and prolonged exposure can result in blistering and second degree burns. Exposure to UVB rays is a risk factor for both non-melanoma skin cancers and malignant melanoma.

UVC radiation gets filtered out by the ozone layer and does not reach the earth. It can be artificially produced for example in arc welding lamps and is extremely damaging to the skin.

What are the risks

People most at risk of skin cancer tend to have:

- fair skin that burns in strong sun
- red or fair hair

- lots of moles or freckles
- a personal or family history of skin cancer
- experience of sunburn, especially when young



The strength of UV rays outdoors varies from day to day and according to the time of year. Find out how strong the sun is by looking at the UV Index. Your burn risk depends on the strength of UV rays and your skin type. Remember to be SunSmart both at work, at home and on holiday.

Recognising Skin Cancers

Non-melanoma skin cancer is the most common and easily treated type of cancer. More than nine out of ten skin cancers are of this type. These signs do not necessarily mean that the skin lesion is cancerous but it is wise to check just to make sure. Remember most skin cancers are completely curable especially if detected in the early stages.

Signs of non-melanoma skin cancer:

- A new growth or sore that does not heal within four weeks
- Persistent skin ulcers that are not explained by other causes
- A spot or sore that continues to itch, hurt, crust, scab or starts to bleed

The two most common forms of skin cancer are **basal cell** and **squamous cell** carcinomas which are easily treated and rarely fatal.

Basal cell carcinoma

Basal cell carcinoma is the most common and tends to affect older people. It grows quite slowly and usually starts as a small round or flattened lump that is red, pale or pearly in colour. Sometimes it appears as a scaly, eczema-like patch on the skin. Basal cell cancers usually occur on areas of skin most exposed to the sun such as the head, neck, shoulders and limbs.

Squamous cell carcinoma

Squamous cell carcinoma is more serious than basal cell cancer as it can spread to other parts of the body if left untreated. Squamous cell cancers appear as persistent red scaly spots, lumps, non healing sores or ulcers which may bleed easily. They also tend to affect older people and occur most often on the head, neck, hands and forearms. Some industrial chemicals can also cause squamous cell carcinoma.

People who work outdoors or who spend lots of time outside are particularly susceptible to these cancers and need to cover up to protect their skin.

In the UK there were over 84,500 cases of non-melanoma skin cancer diagnosed in 2007. Treatment for non-melanoma skin cancer is usually very successful.

Malignant Melanoma

Malignant melanoma is the most serious type of skin cancer and in 2007 10,672 people in the UK were diagnosed with it. It usually develops in cells in the outer layer of the skin but can spread to other parts of the body and may be fatal. It is vital to detect and treat it early. Melanoma can affect young adults as well as older people. Melanoma is the most common cancer in young adults (aged 15-34) and is twice as common in young women

as in young men, but more men die from it. There were more than 2000 deaths in 2008 from malignant melanoma.

What to look for

There are signs which help to identify melanoma – look for changes to a skin mole including:

- ✿ An existing mole or dark patch is getting larger or a new one is growing
- ✿ A mole has a ragged outline (ordinary moles are smooth and regular)
- ✿ A mole has a mixture of different shades of brown and black (ordinary moles may be dark brown but are all one shade)

The signs listed above do not necessarily mean that a mole is becoming cancerous but again it is best to check with your doctor just to make sure. Remember the sooner cancer is detected and treated the better the chance of a complete recovery.

How to be SunSmart

- ✿ Avoid the sun when at its height (usually 11am – 3pm)
- ✿ Take care never to burn
- ✿ Use shade whenever possible: trees, umbrellas, shelters
- ✿ Take extra special care of babies' and children's delicate skin
- ✿ Wear a wide-brimmed hat and sunglasses with UV protection
- ✿ Cover up with tightly woven, loose-fitting clothing; long sleeves, trousers, skirts
- ✿ Use a broad spectrum sunscreen (SPF 15 or higher) on exposed skin
- ✿ Avoid using sun-beds or tanning lamps
- ✿ Check your skin regularly and report any unusual changes to your doctor without delay



Sunscreens do not offer total protection from the sun's rays and using it is only one way to reduce your risk of skin cancer.

EVERY EFFORT SHOULD BE MADE TO PROTECT CHILDREN FROM THE SUN

Babies under six months are even more at risk because their skin has not yet developed all its natural defences. They should be kept out of the sun at all times.









Ten tips for protecting children in the sun



Use shade – keep babies in complete shade: under trees, umbrellas, canopies or indoors



Cover them up – dress children in cotton clothing that is baggy, close-weave and cool. Oversized shirts are good for covering most of their skin.

-  **Use dry clothing** – Remember that wet clothing stretches and can lose up to half of its UV protection – put children in dry clothing after playing in water.
-  **Protect shoulders and necks** – Don't put children in vest tops or sundresses if they are spending a lot of time outdoors – shoulders and backs of necks get easily burned.
-  **Wear sunglasses** – Buy good quality, wraparound sunglasses for children as soon as they can wear them. Sunglasses don't have to be expensive brands, but toy sunglasses can do more harm than good.
-  **Find hats they like** – Encourage children to wear hats with brims, especially if they are not wearing sunglasses. The wider the brim, the more skin will be shaded from the sun.
-  **Use sunscreen wisely** – Apply factor 15+ sunscreen 15-30 minutes before children go outdoors. Then reapply generously once outside to be sure of good coverage. Don't forget their shoulders, nose, ears, cheeks, tops of feet.
-  **Remember sunscreen washes off** – Always use waterproof sunscreen (factor 15+) when children are swimming or playing outdoors with water. Reapply after towelling.
-  **Don't forget school time** – Remember play times and lunch breaks on summer school days too. Give children a hat to wear and, if they can't apply sunscreen at school, cover their exposed skin with factor 15+ before they go.
-  **Remember you can burn in the UK** – The Great British sun is quite capable of burning your child! Take extra care at home as well as abroad.

Children and young adults need to be particularly careful in the sun as in periods where they are growing rapidly their skins are very vulnerable to the sun's rays. Also the more occasions where a child burns his or her skin then the greater the chance of that child developing skin cancer in adult life – since the damage to the skin cells has a cumulative effect.

Keep babies in the shade. All children should wear a hat and a high protection factor sunscreen of 15+.
Sunscreens

A visit to your high street chemist can throw you rapidly into a state of confusion with the array of different creams, lotions, milks and oils on offer. The higher the number (SPF = Sun Protection Factor) then the greater the protection that product will give. It is recommended you use a SPF of 15 or higher on any exposed skin. Use it 30 minutes before going outside and reapply it frequently and generously. Use a water-resistant product when swimming especially on children who love playing in the water but again reapply frequently.

You should never use sunscreen to enable you to spend longer in the sun but to increase your protection. No matter how high the factor, sunscreen alone cannot protect us completely from sun damage.

Expensive sunscreens will not necessary give you better protection (you may be paying for a brand name.) All types are tested and the cheaper brands are just as effective if used properly.

Buying Sunscreen

Choose one

- ☀ With an SPF of 15 or above – this will give you over 90% protection
- ☀ Labelled 'broad spectrum' – to protect against UVA and UVB
- ☀ That is water resistant – it is less likely to wash or be sweated off
- ☀ With a valid 'use by' date – most sunscreens have a shelf life of 2-3 years
- ☀ You can afford – you don't have to pay for expensive brands. All types are tested and the cheaper brands are just as effective if used properly – just remember factor 15+

When using a sunscreen, remember

- ☀ Try to apply it 15-30 minutes before going out in the sun
- ☀ Apply to clean, dry skin and rub in only lightly
- ☀ Use generous amounts
- ☀ Re-apply once outside to ensure even coverage
- ☀ Then re-apply every 2 hours or more frequently if washed, rubbed or sweated off
- ☀ Put on before make-up, moisturiser, insect repellent, and so on

Sun Beds

Avoid using sun-beds. It is now known that the UVA radiation emitted by sun-beds can contribute to **skin cancer** as well as **ageing skin prematurely**. A tan produced by UVA only, does not thicken the skin as natural sunlight does and therefore offers little protection against sunburn – perhaps at best the equivalent of an SPF 4 sunscreen. Long term frequent use of a sun-bed can cause permanent damage to your skin.

Risks from sun-bed use:

- ☀ Burnt and peeling skin
- ☀ Dry and itchy skin or a rash
- ☀ Eye infections including conjunctivitis
- ☀ Premature skin ageing and wrinkling
- ☀ Increased risks of cataracts in the eye
- ☀ Increased risk of skin cancer

Sun-beds should never be used by:

- ☀ The under 16's
- ☀ People who burn easily and tan poorly – those with pale skin, fair or red hair
- ☀ People using medication that could make their skin more sensitive
- ☀ People who have had skin cancer or have a family history of it
- ☀ People with a lot of freckles or moles

For information on cancer prevention and screening then please contact:

Sue White – Cancer Prevention Coordinator Cancer Prevention and Screening Services
Cobalt Linton House Clinic Thirlestaine Road Cheltenham GL53 7AS
Telephone 01242 535900 during office hours Website www.cobaltappeal.com

References

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