



# Sun Safety AND SKIN CANCER.

The Facts, Prevention and Detection.  
Everything you need to know for safe skin.  
For further information: [www.skcin.org](http://www.skcin.org)



# SKIN CANCER

Rates of skin cancer are increasing faster than any other cancer in the UK, with figures doubling every 10 to 20 years. More than 11,500 cases of malignant melanoma the deadliest form of skin cancer are diagnosed every year in the UK and over 2,500 will die from the disease this year alone.

## But surely it won't happen to me?

Wrong. It doesn't matter whether you're young, middle-aged or old, melanoma doesn't discriminate where age is concerned. The simple fact is that if you fail to protect your skin from UV radiation caused by the sun and/or sunbeds, you're putting yourself at risk. If you allow your skin to become red and burn, this risk can dramatically increase.

Skin cancer used to be most prevalent amongst 50-somethings, the commonest age for most cancers to strike, but research has shown that malignant melanoma - the deadliest form of the disease is now one of the most common cancers in young adults aged 15-34 in the UK, alarmingly causing more deaths than in Australia.

Experts believe this is a legacy of binge tanning, the package holiday and sunbed use which became fashionable around 1970 with the increased desire to be tanned. For decades Britons have been roasting themselves, blissfully unaware of the major link we now know exists between skin cancer and sunbathing.

According to dermatologists you don't have to lie on a beach every day for two weeks to be at risk though. Spending just ten minutes walking or sitting around in strong sunshine at lunchtime, for instance, without wearing sunscreen can be enough to get sunburned and cause damage to exposed skin.

The good news is that skin cancer can be almost totally prevented just by adopting some simple and inexpensive suncare habits and it's never too late to start protecting yourself properly.



## THE FACTS

- Skin cancer is the most common cancer in the UK
- More people die from skin cancer in the UK than Australia
- Malignant melanoma, the deadliest form of skin cancer is one of the most common cancers in young adults (aged 15-34) in the UK
- Over the last twenty-five years, rates of malignant melanoma in Britain have risen faster than any other common cancer
- 80% of all skin cancers are caused by over-exposure to the sun and/or sunbeds

There's also no avoiding the fact that skin cancer is on the increase and it's a killer. So, before you strip off and feel the warmth of the sun on your skin this summer, whether you're on an idyllic beach abroad or you're enjoying something as simple as a picnic or a bike ride in this country, ask yourself one question: Am I being sun safe or am I dying to get a tan?

**Please enjoy the sun, it makes us all feel better, but do it safely!**

# SUNBURN AND SUNBEDS



**Sunburn** is a reaction to over-exposure of UV radiation caused by the sun and/or sunbeds. The superficial layers of the skin release chemicals that cause your blood vessels to expand and leak fluid causing swelling, pain and redness. Without sun protection, UV radiation starts to penetrate deep into the layers of the skin causing damage to the skin cells. Skin turns red within 2-6 hours of being burnt and continues on for the next 24 to 72 hours. The simple fact that your skin has changed colour is a sign of damage.

**UVA Radiation** penetrates deep into the skin affecting the living cells that lie under the skin's surface. UVA causes long term damage like wrinkles, blotchiness, sagging and discolouration.

**UVB Radiation** penetrates the superficial layer of skin and is the main cause of tanning and sunburn.

**Both UVA and UVB** have been demonstrated to induce immunosuppression and DNA damage. These changes may lead to skin cancer.

**Sunbeds are not safe 'FACT'.** Research has proved that sunbeds give out the same harmful UV rays as the sun, damaging the DNA in our skin cells which can cause all types of skin cancer. It is estimated that sunbeds cause around 100 deaths from melanoma in the UK each year with incidences rising at an alarming rate.

Experts link the dramatic rise in the incidence of melanoma in the 15-34 age group to sunbed use in young adults. Research has shown a higher risk of skin cancer for those who have used sunbeds more often, for longer periods of time, or at a younger age. ***Using a sunbed just once a month can increase your risk of skin cancer by more than half and regular sunbed use under the age of 35 increases the risk of skin cancer by an alarming 75%.***

**WARNING**  
Regular sunbed use under the age of 35 increases the risk of skin cancer by 75%

A common misconception is that a sunbed tan will prepare or protect your skin before you go on holiday - it won't! The intensity of some types of UV rays from sunbeds can be up to 10-15 times higher than that of the midday sun. Burning or going red under a sunbed is a sign that you have seriously harmed your skin. Sunbeds can cause premature aging, sagging, wrinkling and blotching of the skin - once the tan fades the damage remains and can have very serious consequences over time.

# PREVENT SKIN CANCER AND PROTECT YOUR SKIN

The main cause of skin cancer is exposure to UV from sunlight or sunbeds. Remember it's not just sunbathing that puts you at risk but just being in the sun without adequate protection. If you take part in outdoor hobbies or sport such as golf, cricket, bowls, fishing or gardening for example, or have an outdoor job, you will be at greater risk. To keep safe and make sure you NEVER BURN you should adhere to the following guidelines;

## THE FIVE S'S OF SUN SAFETY

### 1) SUNSCREEN

Apply SPF 30+ broad spectrum, 4 star + rated, waterproof sunscreen every two hours.

### 2) SUNHAT

Wear a broad- brimmed hat that shades your face, neck and ears.

### 3) SUNGLASSES

Wear wrap-around sunglasses with UV protection to protect your eyes from the sun's rays.

### 4) SHOULDERS

Shoulders are easily burned, try to keep them covered with protective clothing.

### 5) SHADE

Seek shade - particularly between 11am & 3pm, when UV penetration is at its strongest.



**FIVE  
SIMPLE  
STEPS TO  
KEEP SAFE  
IN THE  
SUN!**

# PROTECTING YOUNG CHILDREN

Studies have shown that sunburn in childhood can double the risk of developing melanoma (the deadliest form of skin cancer) in later life. Young skin is very delicate and easily damaged by the sun, therefore it is essential that all children are adequately protected. We experience over half our lifetime exposure to the sun before we reach 18 and burning during this time can cause irreversible damage.

Use a minimum SPF of 30+ sunscreen with a 4-5 star UVA rating.

Ensure good coverage, don't forget their shoulders, ears, nose, cheeks and tops of feet.

Apply 20 minutes before children go outdoors and reapply at least every 2 hours.

Use a waterproof sunscreen on children over 3 years when swimming and reapply immediately after towelling. (waterproof sunscreens should not be used on children under 3 years as they can easily overheat).

Keep toddlers and babies in the shade as much as possible, particularly when abroad.

UV protective sun suits are excellent for young children, but don't forget to apply sun screen on exposed areas.

Don't forget school times - lunch breaks are taken at the time of day when UV penetration is strongest.

Remember children can still burn on overcast days! No fair skinned baby, toddler or child should have a suntan or be sunburned!





# CHOOSING THE RIGHT SUNSCREEN

AND UNDERSTANDING UVA PROTECTION

To ensure that your sunscreen of choice is going to protect you adequately, you have to consider 2 things:

*Firstly, will it help prevent me from going red?*

Choose a high Sun Protection Factor (SPF); this is the number on the front of the pack and most white skinned people in the UK will need SPF 30 or higher to stop them from burning in the summertime.

*Secondly, will it stop me from getting sun damaged skin, from looking old before my time and help protect from the sun's harmful rays?*

UVA Radiation causes long term damage like wrinkles, blotchiness, sagging. It also contributes to skin cancer. To protect your skin from this damage choose a product with a superior UVA 4-5 star rated protection symbol on the back of the pack.



Sunscreen absorbs this percentage of UVA rays compared with UVB



## APPLYING SUNSCREEN

Apply your Sun Protection Factor (SPF) 30+ sunscreen 20 minutes before going outside and always reapply at least every 2 hours. It is important to use a generous amount - the average sized adult should apply at least a teaspoon of sunscreen to each arm, leg, front and back of body and at least half a teaspoon to the face (not forgetting the ears and neck). If you apply the sunscreen too thinly it will reduce the SPF factor!

### WHO IS MOST AT RISK OF SKIN CANCER?

As a predominantly fair skinned population, no matter how dark our skin is, or how easily we tan, **the fact is WE ARE ALL AT RISK OF SKIN CANCER!** However, some people are at greater risk due to their skin type and typically tend to have one or more of the following:

- FAIR SKIN THAT BURNS EASILY
- RED OR FAIR HAIR
- LOTS OF MOLES AND/OR FRECKLES
- A FAMILY HISTORY OF SKIN CANCER
- A HISTORY OF SUNBURN

### VITAMIN D

Just 15 to 20 minutes of unprotected sun exposure, outside the dangerous 11 am to 3pm time, per day is sufficient to produce the required vitamin D levels.

A hand is shown from the bottom, holding a large, dark, teardrop-shaped object that resembles a piece of weathered metal or a large drop of paint. The object is held against a bright blue sky with a sun flare in the upper left corner, creating a lens flare effect. The object has a rough, textured surface and a small handle or stem protruding from its base, which is held by a hand.

## AT RISK GROUPS

Whilst we are all at risk from skin cancer there are certain groups that are considered to be at greater risk due to their occupation, recreational activities or general lifestyle choices. Practicing the 5 simple steps to protecting your skin (p5) whenever exposed to the sun's harmful rays will significantly decrease the risk of developing what is now the UK's most common cancer.

### REMEMBER

You can still burn even on overcast days.

Your skin is very delicate and should always be protected! See page 5 for 5 simple steps for sun safety.

### **OUTDOOR WORKERS**

While occupational risks are inherent in many jobs, workers who make a living outdoors are often in the sun and will be subject to an increased threat of skin cancer from repeated over-exposure to the sun's harmful ultraviolet (UV) rays.



### **OUTDOOR SPORTS**

Whether playing or spectating outdoor sports or enjoying outdoor recreation on a regular basis, not using adequate sun protection can significantly increase one's exposure to the sun's harmful UV rays, increasing the risk of skin cancer in later life.



### **OUTDOOR HOBBIES**

Outdoor hobbies or everyday tasks such as gardening regularly exposes the skin to the sun's harmful rays. Even if it is only for short periods at a time, unprotected skin can burn easily and quickly and can increase the risk of skin cancer.



### **TAN SEEKERS**

Yearning for an all-year-round tan, using sunbeds and/or sun bathing in the summer months or on holiday abroad can be extremely dangerous. Remember any change in colour of the skin is evidence of skin damage - there's no such thing as a safe sun tan.



# TYPES OF SKIN CANCER

Skin cancer can be divided into two main groups; Non Melanoma skin cancer (NMSC) and Malignant Melanoma (MM). It is also important to look out for pre-cancerous skin lesions such as Actinic Keratosis and Intra-Epidermal Carcinoma (Bowen's Disease)

**Actinic Keratosis** (Solar Keratosis, AK, SK) are pre-cancerous skin lesions with the potential to develop into cancer and are the result of long-term over-exposure to the sun. More than 80% occur on the head and neck, back of the hands and forearms. Usually actinic keratosis appear as small, brown, pink or whitish, scaly, red single or multiple rough spots smaller than 1 cm in diameter. They can feel rough or cause soreness, irritation, discomfort or pain or they may just pose a cosmetic nuisance.



**Intra-Epidermal Carcinoma (Bowen's Disease)** is also a precancerous lesion that typically presents as an asymptomatic, slow growing, sharply-demarcated, scaly, red, pink, salmon coloured patch or plaque, most commonly on the head, neck and lower limbs. The border may be irregular. The surface may be flat, scaly, crusted, eroded, ulcerated, velvety or warty. Because of its asymptomatic nature, lesions may become very large by the time of presentation.



# NON MELANOMA SKIN CANCERS

## BASAL CELL CARCINOMA AND SQUAMOUS CELL CARCINOMA

**Basal Cell Carcinomas** (BCC's or Rodent Ulcers) are the most common type of Skin Cancer, accounting for around 80% of all cases. BCC's are slow growing and very rarely spread anywhere else on the body. BCC's come in different shapes and sizes and can look like pearly, shiny lumps, skin ulcers or even a patch of dry skin or eczema. The main thing to look out for is something on the skin that will not heal. Fortunately BCC's very rarely kill but in rare and extreme cases large or neglected BCCs are capable of extensive local invasion ["rodent" ulcer] – gnawing their way through skin, muscle, bone. Most BCC's are easily treated by a number of methods. However, as the majority occur on the face, having facial surgery with subsequent scarring is not to be taken lightly. In some cases, skin cancer removal can be psychologically distressing and can result in physical disfigurement.



**Squamous Cell Carcinomas** (SCC's) typically present on the face, ears, lips, mouth and hands. The appearance varies but is usually a scaly lump, nodule, ulcer or non-healing sore. They often start as small hard white or skin-coloured lumps in the skin that grow at a variable rate. SCC's rarely spread to other parts of the body - but if left untreated, the tumor will increase in size and could spread to local lymph nodes or around the body and in extreme cases can be life threatening.



# MALIGNANT MELANOMA

Malignant melanoma is the rarest form of skin cancer, but is the most serious and can kill. It affects the pigment producing cells (melanocytes) found in the skin - it can appear as a new mole or can arise from an existing mole on the skin. Malignant melanoma has the potential to spread to other sites and organs within the body, making early detection of the disease vital for survival. Malignant melanoma is curable if treated early, but is more difficult if the spread has occurred.

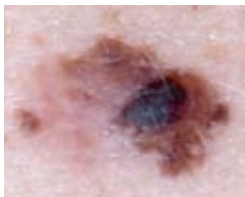
## EARLY DETECTION

Those most at risk from melanoma are those with fair skin, lots of moles and/or freckles or a family history of skin cancer - however everyone is at risk - especially if they spend time in the sun and/or use or have used sunbeds. A melanoma can grow anywhere on the body so it is important to check your entire body regularly (once per month) for any changes or abnormalities. You may have some moles or dark patches on your skin that are flat or slightly raised - usually these will remain harmless, however you should try to detect any moles or patches that have changed in shape, size or colour, here are some signs to look out for...

**You should consult your doctor immediately if you develop any of the following signs as they may indicate a melanoma**

- Changing shape, particularly getting an irregular outline
- Changing colour, getting darker, becoming patchy or multi-shaded
- An existing mole getting bigger or a new mole growing quickly
- If a mole starts to itch or become painful
- If a mole is bleeding, becoming crusty and/or looks inflamed

The ABCD of Melanoma rule (right) will help you to remember what to look out for - the example photographs show abnormal moles and melanomas - but remember yours may not look exactly like these, so if you notice ANY changes or unusual marks that have lasted more than a few weeks **YOU MUST CONSULT YOUR DOCTOR IMMEDIATELY!**



### **A=ASYMMETRY**

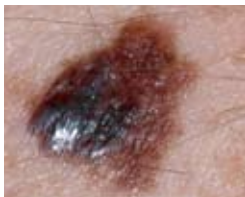
When half the mole does not match the other half



### **B=BORDER**

When the borders of the mole are irregular/ragged

## **REMEMBER THE ABCD OF MELANOMA**



### **C=COLOUR**

When the colour of the mole varies throughout



### **D=DIAMETER**

If the diameter is larger than a pencils eraser-6mm

Remember, if you have any doubt you should consult your doctor immediately.



## SKCIN SUN SHOP

[www.skcin.org](http://www.skcin.org)

The new Skcin Sun Shop has been set up to bring you a range of sun related products to allow you to enjoy and stay safe in the sun. All the partners we work with in the shop have fantastic products that we are happy to recommend. What is even better is that they will make a donation to Skcin for every purchase you make with them through us!

This booklet is bought to you by SKCIN: The Karen Clifford Skin Cancer Charity. Skcin's primary objectives are to significantly raise awareness of skin cancer in the UK, promote prevention and early detection and campaign for cultural and educational change.

The charity was established in 2006 and is now recognised the only national skin cancer specific awareness charity.

SKCIN are co-ordinators of the Skin Cancer UK campaign, supporters of the Melanoma Taskforce and contributors to the European Melanoma Advocacy Group.

To find out more about the charity and further information about sun safety and skin cancer visit [www.skcin.org](http://www.skcin.org)



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*Please enjoy the sun, safely!*