

# SUN SAFETY

## AND SKIN CANCER

The Facts, Prevention  
and Early Detection

*Everything you need to  
know, to enjoy the sun safely  
and detect skin cancer early.*

This booklet has been produced by national  
melanoma and skin cancer charity, Skcin:  
The Karen Clifford Skin Cancer Charity  
Registered Charity No: 1150048  
For further information visit: [www.skcin.org](http://www.skcin.org)



# SKIN CANCER THE FACTS

ALMOST ALL SKIN CANCERS ARE CAUSED BY OVER-EXPOSURE TO ULTRAVIOLET RADIATION (UVR). ALL SKIN TYPES CAN BE DAMAGED BY UVR, DAMAGE IS PERMANENT, IRREVERSIBLE INCREASES WITH EACH EXPOSURE AND CAN RESULT IN DEATH.

- Non-melanoma skin cancer is the UK's most common cancer.
- Malignant melanoma, the deadliest form of skin cancer is now one of the most common cancers in young adults (aged 15-34) in the UK.
- Over the last twenty-five years, rates of melanoma in Britain have risen faster than any other common cancer.
- According to Cancer Research UK, 1 in 36 UK males and 1 in 47 UK females will be diagnosed with melanoma skin cancer in their lifetime.
- **OVER 86% OF ALL MELANOMA AND THE MAJORITY OF ALL OTHER SKIN CANCERS ARE CAUSED BY DAMAGE FROM UV, MAKING THE DISEASE ALMOST ENTIRELY PREVENTABLE!**

## REMEMBER

BY ADOPTING SIMPLE  
SUN SAFE PRACTICES  
SKIN CANCER CAN  
BE PREVENTED AND  
LIVES SAVED.

# SOLAR UVR THE FACTS

SOLAR ULTRAVIOLET RADIATION (UVR) IS A KNOWN CARCINOGEN, IT CANNOT BE SEEN OR FELT AND IS NOT RELATED TO TEMPERATURE. IT CAN PASS THROUGH CLOUD, BOUNCE OFF REFLECTIVE SURFACES AND IS THE PRIMARY CAUSE OF SKIN CANCER.

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

Wrong. skin cancer doesn't discriminate where age is concerned. The simple fact is that if you fail to protect your skin from UV radiation you're putting yourself at risk. If you allow your skin to become red and burn, this risk can dramatically increase.

There's 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 on a beach abroad or simply enjoying 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?**

## WARNING

WE ARE ALL AT RISK  
OF DEVELOPING SKIN  
CANCER. PROTECT  
YOUR SKIN AND LEARN  
HOW TO SPOT EARLY  
WARNING SIGNS

# SUN BURN THE FACTS

THE SIMPLE FACT THAT YOUR SKIN HAS CHANGED COLOUR IS A SIGN OF DAMAGE. OUR SKIN TURNS RED WITHIN 2-6 HOURS OF BEING BURNT AND CONTINUES TO DEVELOP FOR THE NEXT 24 TO 72 HOURS.

**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 our blood vessels to expand and leak fluid causing swelling, pain and redness. Without sun protection, UV radiation penetrates deep into the layers of the skin causing damage to the skin cells.

**UVB** rays reach the outer layer of your skin, they are burning rays and the primary cause of sunburns and skin cancer. **UVA** rays penetrate the middle of the skin and also contribute to skin burning, skin cancer and wrinkling / premature ageing.

## WARNING

UVA AND UVB HAVE  
BEEN DEMONSTRATED  
TO CAUSE DNA CELL  
DAMAGE WHICH  
CAUSES SKIN  
CANCER

# SUNBEDS THE FACTS

SUNBEDS ARE NOT A SAFE ALTERNATIVE TO SUN-BATHING. SUNBEDS EMIT THE SAME HARMFUL UV RAYS AS THE SUN, CAUSING DNA DAMAGE THAT INCREASES A PERSON RISK OF DEVELOPING DIFFERENT KINDS OF SKIN CANCER, INCLUDING THE MOST SERIOUS FORM MELANOMA.

There is so much evidence to support this, that the International Agency for Research on Cancer (IARC) has classified sunbeds as a Group 1 carcinogen. This is its highest cancer risk category. Reports further conclude that the risk of cancer is significantly higher when exposure takes place at a younger age.

A common misconception is that a sunbed tan will prepare or protect your skin before you go abroad. The fact is, that sunbeds are no safer than exposure to the sun itself and the intensity of UV rays from some sunbeds can be 10-15 times higher than the Mediterranean midday, summer sun. Once the tan fades the damage remains, which can result in very serious consequences over time.

## WARNING

REMEMBER THAT  
IT'S ILLEGAL TO USE  
SUNBEDS IN THE UK  
IF YOU'RE UNDER  
THE AGE OF 18.

# THE SOLAR UV INDEX



- The UV index is a 5 category solar UV forecast
- The higher the number the stronger the UVR and the less time it takes damage to occur.
- **When the UV index reaches 3 or above, sun protection measures should be taken.**

## VITAMIN D AND UV

Despite the serious health risks, UV radiation, in small amounts, is the most efficient way to boost our Vitamin D supply, so it's important to strike the right balance. Whilst there is no one-size-fits-all level of exposure - for most, Vitamin D can efficiently and sufficiently be produced in around 15-20 minutes of sun exposure per day, from doses of UV below which cause reddening or burning of the skin.

### REMEMBER

YOU CAN CHECK THE  
UV FORECAST AT ANY  
TIME AND FOR ANY  
LOCATION IN THE  
UK BY VISITING  
[SKCIN.ORG](http://SKCIN.ORG)



# FIVE S's OF SUN SAFETY

SKCIN RECOMMEND FIVE  
SIMPLE STEPS TO SUN SAFETY.  
WHEN UV LEVELS REACH 3 OR ABOVE  
SLIP, SLOP, SLAP, SLIDE, SHADE.

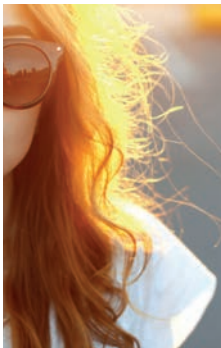
Remember it's not just sunbathing that puts you at risk, but being in the sun without adequate protection. If you regularly take part in outdoor hobbies or sports, or work outdoors, you could be at greater risk. Make sure you use all five S's of sun safety and NEVER BURN!

1. **SLIP** on a t-shirt
2. **SLOP** on SPF 30+ sunscreen
3. **SLAP** on a broad brimmed hat
4. **SLIDE** on quality sunglasses
5. **SHADE** from the sun when possible

*See below for detailed guidance.*

## WARNING

UVA AND UVB HAVE  
BEEN DEMONSTRATED  
TO CAUSE DNA CELL  
DAMAGE WHICH  
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CANCER



## 1: SLIP on sun protective clothing

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- Clothing can be one of the most effective barriers between our skin and the sun.
- Clothing should cover as much skin as possible.
- Always keep shoulders covered, they can easily burn.
- A closer weave fabric will provide better protection.
- A high UPF rated fabric provides best protection.

## 2: SLOP on SPF 30+ sunscreen

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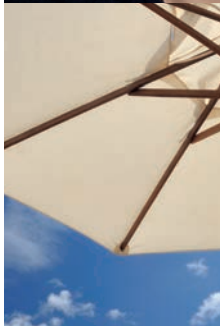
- No sunscreen provides complete protection.
- Never rely on sunscreen alone to protect skin.
- Always use a sunscreen with a Sun Protection Factor (SPF) 30 or above, preferably water resistant.
- Make sure it's broad-spectrum and carries a UVA symbol (if it has a star rating, use a minimum 4 star).
- Store in an accessible, cool place and remember to check the expiry date.
- Apply a generous amount to clean, dry, exposed skin.
- Apply 20 minutes before going outdoors.
- Regardless of the instructions all sunscreens should be reapplied at least every 2 hours (more often if perspiring) and straight after swimming.
- Protect your lips with an SPF 30+ lip balm.

## 3: SLAP on a wide brimmed hat

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- Wear a wide brimmed hat to shade the face, neck & ears. Legionnaire hats (with a flap that covers the neck and joins the front peak) or a hat (with a minimum 7.5cm brim) are the most effective.
- A close weave or UPF rated fabric provides best protection.
- Baseball caps do not provide adequate shade.





## 4: SLIDE on quality sunglasses

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- Solar UV radiation can be damaging to the eyes, so always wear quality sunglasses.
- Overall protection depends on the quality of the lens as well as the design.
- Look for the European CE mark, which indicates a safe level of protection.
- Those labelled with a high EPF (which ranges from 1-10) will provide best protection.
- Ensure they are close fitting and wrap around to stop solar UVR entering the sides and top.
- Remember price and darkness of the lens have no reflection on the quality of protection.

## 5: SHADE from the sun when possible

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- Shade can provide a good barrier from UV rays.
- Seek shade whenever possible, particularly at the hottest times of the day between 11am and 3pm when UV penetration is strongest.
- Keep toddlers and babies in the shade at all times.
- Never rely on shade alone, always combine with personal protection measures.

### WARNING

No matter how easily we tan, **WE ARE ALL AT RISK!** However, those at greater risk typically fall into one or more of the following categories:

## WHO IS MOST AT RISK OF SKIN CANCER?

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

# CHILDREN AND BABIES

ONE BLISTERING SUNBURN IN CHILDHOOD OR ADOLESCENCE MORE THAN DOUBLES A PERSON'S CHANCE OF DEVELOPING MELANOMA IN LATER LIFE. THE DAMAGE IS IRREPARABLE.

- Use UV protective sun suits & broad-brimmed or legionnaire hats for optimum protection.
- Use a minimum SPF 30 (ideally SPF 50) sunscreen on areas of exposed skin
- Ensure it is broad-spectrum, to provide both UVA and UVB protection - ideally UVA rated 5 or 4 star.
- Apply liberally, ensuring good coverage.
- Don't forget shoulders, ears, nose, cheeks and feet.
- Apply 20 minutes before children go outdoors.
- Reapply at least every 2 hours.
- Reapply immediately after swimming / towelling.
- Keep toddlers and babies in the shade as much as possible, particularly when abroad.
- Always keep shoulders covered!
- Don't forget to ensure they are protected prior to going to school or nursery and throughout the day during school / pre-school hours!



# CHECKING YOUR SKIN

THE SOONER A SKIN CANCER IS IDENTIFIED AND TREATED, THE BETTER YOUR CHANCE OF AVOIDING SURGERY OR, IN THE CASE OF A SERIOUS MELANOMA OR OTHER SKIN CANCER, POTENTIAL DISFIGUREMENT OR EVEN DEATH.

- Skin cancers seldom hurt and are much more frequently seen than felt.
- Get to know your skin and what is normal for you so that you can easily identify any changes.
- Undress completely, make sure you have good light, use a mirror and/or get someone to help you to check hard to see spots.
- Make sure you check your entire body - for example; scalp, soles of the feet, between fingers and toes and under nails.

## WARNING

IT IS IMPORTANT  
TO REGULARLY CHECK  
YOUR SKIN FOR SIGNS  
OF CHANGE TO DETECT  
CANCER EARLY. IT COULD  
SAVE YOUR LIFE!



# PRE-CANCEROUS SKIN LESIONS

## ACTINIC (OR SOLAR) KERATOSIS



- Pre-cancerous skin lesions that are slow growing with the potential to develop into cancer.
- Commonly found on the head, neck, back of hands & forearms.
- Usually appear as small brown, pink or whitish, scaly, red, single or multiple rough spots, smaller than 1cm in diameter.
- They can feel rough and cause soreness, irritation, discomfort or pain, or may just pose a cosmetic nuisance.

## INTRA-EPIDERMAL CARCINOMA (BOWEN'S DISEASE)



- Pre-cancerous skin lesions that are slow growing.
- Most commonly found on the head, neck and lower limbs.
- Presents as an asymptomatic sharply demarcated, scaly, red, pink or salmon coloured patch or plaque.
- The border may be irregular.
- May be flat, scaly, crusted, eroded, ulcerated, velvety or warty.
- Due to asymptomatic nature lesions may become very large.

# NON-MELANOMA SKIN CANCER

Remember the earlier skin cancer is identified,  
the easier it is to treat, so if in doubt - get it checked out!

## BASAL CELL CARCINOMA (NON-MELANOMA SKIN CANCER)



- The most common type of non-melanoma skin cancer.
- The majority occur on sun exposed areas i.e. the face, neck and ears.
- Slow growing and rarely spread anywhere else on the body.
- Can appear in different shapes and sizes.
- Look out for pearly, shiny lumps, skin ulcer, or patch of dry skin that won't heal. In extreme cases, large or neglected BCC's can cause extensive local invasion.

## SQUAMOUS CELL CARCINOMA (NON-MELANOMA SKIN CANCER)



- Typically present on the face, ears, lips, mouth and hands and grows at variable rates with varied appearance.
- Usually presents a scaly lump, nodule, ulcer, or non-healing sore.
- Often start as a small, hard, white, or skin coloured lumps.
- Rarely spreads, but left untreated will increase in size.
- Could spread to local lymph nodes or around the body.
- In extreme cases can be life threatening.

# DETECTING MELANOMA

- Melanoma is the most deadly form of skin cancer.
- Melanoma most commonly appear as a new spot or mole (70%), or an existing spot or mole that changes in colour, size or shape.
- Left untreated, it can spread to form new cancers around the body.
- Melanoma can appear anywhere on the body, not just areas exposed to UV - on the soles of the feet, under nails or in the eye for example.

The 'ABCDE OF MELANOMA' is a common screening tool used to compare the characteristics of normal moles versus melanoma. The photographs below show examples of melanoma and should help you to recognise what is not normal. **However, not all melanoma look like these and some may be very small, so it is important to seek professional advice if you notice any new, unusual marks or changes that have lasted more than a few weeks.** It is also important to check your skin regularly (the experts recommend once per month), especially if you are at higher risk of developing skin cancer.

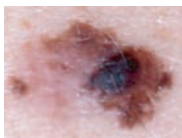
## SEEK PROFESSIONAL ADVICE IF YOU DEVELOP ANY OF THESE SIGNS:

- If a mole changes shape, particularly getting an irregular outline.
- If a mole changes colour/getting darker, patchy or multi-shaded.
- If a mole is getting bigger or a new spot, mark or mole is growing quickly.
- If it starts to itch, gets painful, starts bleeding, gets crusty or inflamed.
- Any skin, nail or mucosal (lips and genitalia) lesion that looks or is behaving differently to the rest of your moles / skin lesions.



# THE ABCDE OF MELANOMA

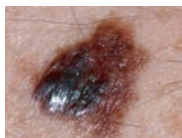
- A = ASYMMETRY:** when one half of the mole doesn't match the other.
- B = BORDER:** when the borders are irregular, ragged or blurred.
- C = COLOUR:** when the colour changes or varies throughout and/or there appears to be no uniform pigmentation.
- D = DIAMETER:** when the diameter is greater than 6mm (could be smaller).
- E = EVOLVING:** any changes to appearance or sensation is the biggest indicator.



**A = ASYMMETRY**



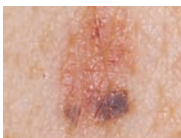
**B = BORDER**



**C = COLOUR**



**D = DIAMETER**



**E = EVOLVING**

**REMEMBER**

**IF YOU'RE IN  
DOUBT, GET IT  
CHECKED OUT!**

Another clinical clue to detecting skin cancer is the 'Ugly Duckling' sign. If you notice anything on your skin that looks ugly and does not match the other kinds of spots, marks or moles on your skin, then it's worth taking a closer look to see if you can identify any other signs or symptoms.

**PLEASE NOTE:** Whilst around 70% of melanoma follow the ABCDE rule, other forms of melanoma can look very different.

# NODULAR MELANOMA

Nodular melanoma is the most aggressive form of melanoma, found in around 20% of cases. However, it does not follow the ABCDE of melanoma rule. Nodular melanoma are more even in shape and colour. The tumour is recognised when it becomes a bump (which can vary in colour) and is usually invasive by the time of diagnosis.



The most common sites for nodular melanoma to present are on sun-exposed areas such as the head and neck, also often found on the trunk in men and legs in women - but it can appear on other areas of the body. They grow fast, downward and become quickly invasive (within months) so early detection is vital.

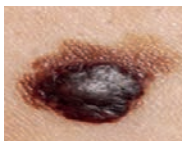
Nodular melanoma are often black, but occasionally are blue, grey, white, brown, tan, red or skin tone. The images here show some examples, but if you detect any lump on the skin that is growing quickly - you should seek professional advice as soon as possible from your GP and/or dermatologist.

## DETECTING NODULAR MELANOMA

- Remember Nodular Melanoma look different to other melanoma.
- They grow quickly, are raised and more even in shape & colour.
- They can vary in colour, some are red or pink, some are brown or black.
- They are firm to touch and dome-shaped.
- They can become quickly invasive - early detection is vital.



**E = ELEVATED**



**F = FIRM**



**G = GROWING**

## REMEMBER THE EFG RULE:

**E = ELEVATED** - An elevated lump or bump that can vary in colour

**F = FIRM** - Feels firm to touch and is often dome shaped

**G = GROWING** - Any lump or bump that is growing persistently

# ACRAL LENTIGINOUS MELANOMA



Unlike other melanoma, Acral Lentiginous Melanoma (ALM) is usually located on the palms of hands and soles of feet. ALM is the only type of melanoma which arises equally across all skin types and is frequently observed in darker skin types. ALM can become quickly invasive so early detection, diagnosis and treatment is vital.



ALM can advance faster than other melanoma. They often appear as a black discolouration, but can be very subtle such as an ill defined patch of light brown or grey discolouration of the skin. In addition to the **ABCDE** of melanoma, look out for a slowly enlarging flat patch of discoloured skin and if you detect something of this nature it is important to get it checked out as soon as possible.

# SUBUNGUAL MELANOMA

Unlike other types of melanoma that grows in surrounding skin, this type begins in the nail matrix - part of the nail bed that protects the skin beneath. Signs and symptoms of subungual melanoma include:



- A light-to-dark brown coloured band on the nail that's usually vertical.
- A dark band on the nail that slowly expands.
- A dark nail pigmentation that can expand to the surrounding skin.
- A nodule underneath the nail (with or without a pigmentation band).
- Nail brittleness and cracking and/or bleeding at the site of pigmentation.
- Subungual melanoma usually affects just one nail at a time.



## CONCERNED ABOUT A SKIN CONDITION, SUSPECT LESION OR MOLE AND WANT A FAST, EXPERT DIAGNOSIS AND TREATMENT PLAN WITHIN 3 WORKING DAYS?

Wave goodbye to an 18 week wait to see a dermatologist! You can get a diagnosis, information about your condition and an effective treatment plan from the UK's largest dermatology practice with MySkinDoctor - within 3 days!

**DOWNLOAD THE APP TODAY**  
[myskindoctor.co.uk](http://myskindoctor.co.uk)







# ABOUT SKCIN AND OUR WORK

For further information visit: [skcin.org](http://skcin.org)

Skcin are the UK's leading skin cancer awareness charity, formed by the family of Karen Clifford (the KC in SKCIN) who passed from the illness in 2005. We operate five national, educational intervention programmes that are dedicated to raising awareness of melanoma and non-melanoma skin cancer, embedding prevention and early detection into the heart of communities nationwide.

**With almost 90% of all skin cancers preventable and early diagnosis vital, education is key to combating the soaring rates of skin cancer in the UK. We focus on pioneering, proactive intervention working with key 'at risk' and 'influential' audiences to create impact and measure outcomes, on a national scale.**



# SUN SAFE SCHOOLS & NURSERIES

NATIONAL ACCREDITATION PROGRAMMES

[sunsafeschools.co.uk](http://sunsafeschools.co.uk) | [sunsafenurseries.co.uk](http://sunsafenurseries.co.uk)

## PLANTING THE SEEDS OF SKIN CANCER PREVENTION IN PRIMARY EDUCATION

Sun Safe Schools and Sun Safe Nurseries are two national accreditation programmes developed by Skcin to assist primary schools and pre-school settings in their duty of care to safeguard children against over-exposure to UV, communicate with parents to gain support and raise awareness within the wider community, and educate children on the importance of sun safety to influence behaviours.

The programmes provide extensive FREE resources, working with thousands of settings across the UK, to date reaching over 750,000 children and families, nationwide.





# SUN SAFE WORKPLACES

## NATIONAL ACCREDITATION PROGRAMME

[sunsafeworkplaces.co.uk](http://sunsafeworkplaces.co.uk)

### **ASSISTING EMPLOYERS IN THEIR DUTY OF CARE TO PROTECT AND EDUCATE THEIR OUTDOOR WORKERS.**

Sun Safe Workplaces is a national accreditation programme has been developed by Skcin to assist employers of outdoor workers in their duty of care to safeguard their employees against over-exposure to solar ultraviolet radiation which is recognised as an occupational hazard in the workplace.

The programme provides extensive resources to help employers asses the level of risk, implement a suitable sun protection policy and educate their workforce about the risks associated with UVR, the importance of personal sun protection measures and how to check their skin for the early signs of both melanoma and non-melanoma skin cancers.



# TRAINING EYES TO SAVE LIVES

[masced.uk](http://masced.uk) | [pro.masced.uk](http://pro.masced.uk)

## **MASCED - MELANOMA AND SKIN CANCER EARLY DETECTION TRAINING, FOR HAIR, BEAUTY AND ALLIED HEALTH PROFESSIONALS**

Skcin's MASCED (Melanoma and Skin Cancer **Early Detection**) training programmes are training eyes to save lives by teaching Hair, Beauty and Allied Health Professionals, how to spot the early signs and symptoms of both melanoma and non-melanoma skin cancers and how to confidently signpost their clients / patients to take appropriate action.

Professionals working across these industries, see our skin regularly, up close and often in places we cannot see ourselves - making them powerful advocates in the fight against the disease. Endorsed, supported and recognised by key industry bodies, Skcin, to date have over 11,000 professionals registered with the programmes, providing potentially life saving skills to hundreds of thousands of clients / patients nationwide.



**@SkcinCharity**

**FOLLOW US ON FACEBOOK, INSTAGRAM & TWITTER**

**Have you found this booklet a useful source of information?  
Would you like to support Skcin in our mission to prevent skin  
cancer and promote early detection to save lives?**

As a charity who relies solely on donations, fundraising and corporate support, every penny counts. Your donations are hugely appreciated and help Skcin develop, produce, print and distribute, life-saving information on the prevention and early detection of skin cancer and continue our pioneering work in educational intervention across the UK. **Together we can build a sun safe, skin cancer free future, for our future generations and saves lives.**

## **WAYS TO DONATE TO SKCIN:**

- Set up a fundraising page and/or donate any amount securely, on-line at: [www.justgiving.com/skcin](http://www.justgiving.com/skcin)
- Send a cheque made payable to 'SKCIN' to: Skcin, 1a Mabel Grove, West Bridgford, Nottingham NG2 5GT
- Visit: [www.skcin.org](http://www.skcin.org) for further information. Thank you.