Skin cancer

How to be SunSmart

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

- Avoid the sun when it's at its highest (usually 11 am - 3 pm).
- Take care never to burn.
- Use shade whenever possible, trees, umbrellas, shelters.
- Take extra special care of ears and children's delicate skin.
- Wear a wide-brimmed hat and sunglasses with UV protection.
- Cover up tight-jawed, close-fitting clothing, long sleeves, trousers, shorts.
- Use a broad spectrum sunscreen (SPF 15 or higher) on exposed skin.
- Avoid using sunbeds or tanning lamps.
- Check your skin regularly and report any unusual changes to your doctor without delay.

Further information

Cancer Research UK
www.cancerresearchuk.org

About cancer and reducing risk

For more about cancer visit our patient information website: www.canceruk.org.uk. A link on specific cancers then malignant melanoma or non-melanoma skin cancer.

If you have a question about cancer, you can call our specialist information nurses on their direct (free) 0800 782 632 or free phone 0800 (CANCER) 226237

About Cancer Research UK

Cancer Research UK is the leading charity dedicated to research on the causes, treatment and prevention of cancer. If you would like to support our work please call 0800 782 632 or visit our website.

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Skin cancer facts
Skin cancer is the most common cancer in the UK and the number of people who get it is increasing. Skin cancer is caused by UV radiation from the sun. The greater your exposure, the higher your risk. Most skin cancers could be prevented by protecting ourselves from the sun’s damaging rays.

This leaflet contains information about different types of skin cancer and how you can guard against them.

What causes skin cancer?
Skin cancer develops when genes in skin cells are damaged by ultraviolet radiation. Most skin cancers are the result of excessive exposure to the sun. Many are caused by sun damage in childhood.

Who is most at risk?
People with fair skin that burns or tans, red or fair hair, or pale eyes are at higher risk. People with black brown and darker olive complexions have a lower risk of skin cancer.

What are the different types?
There are two main types of skin cancer: malignant melanoma and non-melanoma skin cancers.

Malignant melanoma (also known as melanoma) is the most serious type of skin cancer. 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. It is the third most common cancer in 15-39 year-olds. You can find out much more about it in our booklet ‘Malignant melanoma – be a molewatcher for life’.

Signs of melanoma
See your doctor immediately if:
- 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).
- a mole has a mixture of different shades of brown and black (ordinary moles may be brown but are all one shade).

The following signs do not necessarily mean that you have a melanoma, but you should still look out for them. If your mole or dark patch does not return to normal within two weeks, don’t ignore it – see your doctor:
- an inflamed mole or one with a reddish edge
- a mole that starts to bleed, ooze or crust
- a change in sensation of a mole, like a mild itch
- a mole that is bigger than all your other moles

Non-melanoma skin cancer is the most common and easily treatable type of cancer. More than nine out of ten skin cancers are of this type. There are over 400,000 new cases each year in the UK.

There are two main sorts:
- Basal cell cancer is the most common and tends to affect older people. It grows quite slowly and usually starts as a small, flat, round or flattened lump that is red, pale or pearly in colour. Sometimes it appears as a scaly, open lesion-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 cancer is more serious than basal cell cancer as it can spread to other parts of the body if untreated. Squamous cell cancers appear as persistent red scaly spots, lumps, sore or itchy areas, which may bleed easily. They tend to affect older people more often than the head, neck, hands and forearms.

Signs of non-melanoma skin cancer:
- a new growth or sore that does not heal within four weeks
- a spot or sore that continues to itch, hurt, crust, scale or bleed
- persistent skin ulcers that are not explained by other causes

What is ultraviolet radiation (UVR)?
UVR is invisible and cannot be felt on the skin. It penetrates deeply into our cells, causing changes that can lead to sunburn, skin aging, eye damage and skin cancer. There are three types of UVR, but only two reach the earth’s surface: UVA and UVB. UVC is filtered out by the ozone layer.

- UVA causes skin aging and is also likely to cause skin cancer.
- UVB causes redness and sunburn. Exposure to UVB is the major risk factor for all types of skin cancer.

What affects the amount of UVR?
UVR is most dangerous when the sun’s rays are most direct and intense. This is affected by:
- the time of year – the highest risk months in the UK are usually May to September. Near the equator, UVR remains high all year round
- the time of day – UVR is most intense when the sun is high in the sky, around midday
- reflection – UVR can be reflected back from surfaces such as snow, sand, light paint, tiles, cement and water. These reflected rays could reach your face even under a hat
- cloud cover – you can still burn on a day when there is thin cloud, but heavy clouds do offer some protection
- altitude – UVR is greater at higher altitudes

Common questions
Why is it so important to protect babies and children?
Young skin is delicate and easily damaged by the sun. We usually get most of our lifetime’s sun exposure as children and teenagers. Many skin cancers result from sun damage acquired during our early years. Teaching safe sun behaviour to children and their carers helps to protect them right away and sets a good pattern for life.

How can a tan be bad when it makes me feel so much healthier?
There is no such thing as a safe tan. It is a sign of damaged skin. A tan today means wrinkled, rough and leathery skin in later years. More importantly, it increases your chance of developing skin cancer.

Don’t we need sunshine to be healthy?
Our bodies need sunshine to make vitamin D, but most of us get all the sun we need from our daily routine. We don’t generally improve our health or skin by seeking out the sun.

Is UV radiation always highest when it’s hottest?
No, the sun does not need to feel hot to damage your skin. UV levels are highest around midday, but the maximum temperature often occurs later in the day when the earth’s surface has had time to warm up. The heat in the sun comes from infrared rays, not UV rays – you can still burn on cool days.