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Sun Protection

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Introduction



Photo courtesy of NHS Photo Library

Getting a golden tan is a goal for many travellers. However, a tan is not a sign of health - it is a *visible* sign of damage and shows that your skin has been harmed by the sun. This can lead to wrinkles, skin ageing and cancer.

What is ultraviolet radiation?

Ultraviolet (UV) sunlight is made up of invisible wavelengths, divided into three types: UVA, UVB and UVC. Exposure to UV light is linked to long-term skin damage: UVA and UVB light are responsible for skin ageing and cancer.

In mild countries like Britain, UV levels change between winter and summer. In regions near the equator, such as parts of Africa, Asia, Australia, the Caribbean, the Middle-East, and Central and South America, levels are high all year, because sunlight has a shorter distance to travel to reach earth.

Clouds have less effect on UV levels than on temperature. They absorb heat better, so you can still get burnt on cloudy days. A cool wind gives false reassurance, as UV levels can still be high. UV levels also increase at high altitude, and snow, sand and rough or rippling water reflect UV rays, increasing your risk of burning.

Most UV rays enter the skin and pass into tissues. This radiation is then absorbed and can damage our DNA (our genetic information) and can cause skin cancer.

Sunbeds

Sunbeds are not safe. They emit UV rays designed to give you a tan, but will also damage your skin. Cancer Research estimates sunbeds contribute to about 100 skin cancer deaths every year in the UK. They also advise that using sunbeds before the age of 35 increases your risk of cancer by 75%.



Photo courtesy of Cancer

How can I prevent sun damage?

Limit your time in the sun and use an effective sun cream to protect your skin. Sun creams are graded by a sun protection factor (SPF). This is related to the length of protection they give against sunburn. A higher SPF offers longer protection. Sun creams are made from chemicals that absorb UV light. Titanium and zinc oxide are sunblocks that provide a physical barrier against UV rays.



Photo courtesy of NHS Photo Library

Sun creams do not give 100% protection, so it is very important not to spend a long time in the sun, whatever your skin tone. Having fair skin increases your risk of skin cancer. However, having darker skin does not mean there is no risk. Bob Marley, the Jamaican reggae star, died of skin cancer at the age of 36.

Enjoy the sun BUT:

- Avoid going outside when the sun is at its highest point (10am to 3pm).
- Try not to spend a lot of time in the sun.
- Sunbeds are **NEVER** recommended. From April 2011, it will be illegal for anyone under 18 years to use them in the UK.
- Always use a high SPF sun-cream which blocks UVA and UVB radiation - even on cloudy days and if you are skiing or taking part in winter sports.
- Use the right amount of sun cream: at least 2 tablespoons for an average adult every time. Apply 30 minutes before going outside and re-apply every two hours, after swimming, sweating a lot or exercising.
- Cover up - close knit clothes and wide brimmed hats offer the best protection.
- Children are particularly vulnerable to sun damage.
- Babies under 6 months should **NEVER** be left in direct sunlight.
- Children should be protected with high SPF sun cream, clothes, hats and sun shelters.



Photo courtesy of NHS Photo Library

Eyesight:

- Sunlight can cause eye problems, including cataracts and cancer.
- Don't stare directly at the sun.
- Wear sunglasses, ideally wrap-arounds.
- Badly fitting glasses offer poor protection.
- Buy sunglasses that block out 100% of UVA/UVB rays - look for a British Standard mark or UV 400 label.

How does UV light damage my skin?

Ageing

Photo-ageing is gradual skin damage caused by UV radiation. This causes skin to weaken, making it rough and thick or alternatively very thin and fragile.

Sunburn

When skin is damaged by UV radiation, cells try to mend it by releasing chemicals. Sunburn is a visible reaction to this: skin is red and painful and feels hot and swollen. In severe cases, your skin blisters, peels and weeps. Drinking plenty of non-alcoholic fluids and taking pain killers can help symptoms.

Tanning

A tan shows that your skin is making a pigment called melanin. This is your body's way of trying to protect you. A tan is **ALWAYS** a sign of skin damage and does not protect you against UV radiation, which causes skin cancer.

Cancer

Unfortunately, skin cancer is now one of the most common cancers in this country, with more people developing it every year. Some skin cancers can be fatal, especially if they are not caught early.

Skin cancer begins when the cell's genetic material (DNA) starts to change because of UV damage. These cells reproduce independently and can spread into nearby tissues or move into major organs, like the liver or lungs.

Skin cancers can usually be removed by surgery. Chemotherapy or radiotherapy may be needed as well.

- [Basal cell carcinoma](#) - is the most common skin cancer, often found in middle-aged and older people. It starts as slow growing area in the skin often with a pearly, rolled edge. It doesn't usually spread to other parts of your body, but can cause a lot of damage to the affected area.
- [Squamous cell carcinoma](#) - is the second most common skin cancer. Abnormal growths typically appear as firm, tender, persistent areas.
- [Malignant melanoma](#) - is the most dangerous type of skin cancer. Melanomas can be deeply pigmented and attack other parts of your body. Most skin cancer deaths are from malignant melanoma. It is the second most common type of cancer in 15 to 34 year olds.

Exposure to the sun as a child, spending time in very sunny countries and using sun beds, all increase your risk of malignant melanoma.

See your GP as soon as possible if a mole:

- **Changes size, shape or colour or grows very quickly**
 - **Starts itching and/or bleeding**

These are all possible signs of skin cancer.



Photos courtesy of Cancer Research UK

Links

- [Cancer Research UK: SunSmart website](#)
- [NHS Choices: Protect skin in the sun](#)
- [World Health Organization: Sunbeds, tanning and UV exposure](#)