



SUN PROTECTION

GUIDE FOR OUTDOOR WORKERS



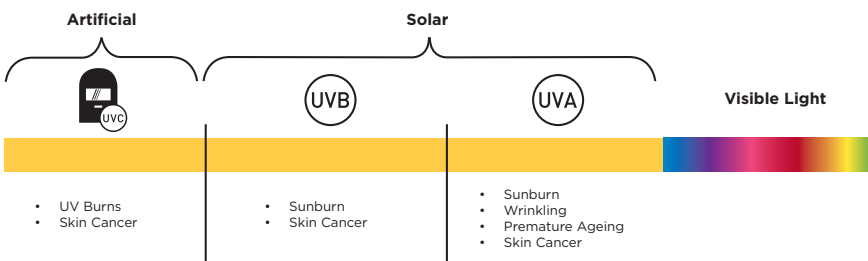
WHAT IS UV?

Ultraviolet (UV) radiation is an invisible type of radiation produced by the sun. There are three distinct types: **UVA, UVB and UVC rays**¹.

UVA rays have a longer wavelength, which means they are able to penetrate into deeper layers of the skin - these rays can also cause premature aging¹.

UVB rays can significantly contribute to the development of skin cancer. These rays have a medium wavelength and can burn the outer layers of the skin¹.

Lastly, while UVA and UVB radiation reaches the earth's surface, shorter wavelength **UVC radiation** is blocked by the ozone layer¹. UVC rays are also damaging and can be created artificially during industrial processes such as welding².



WHAT IS SUNBURN?


Sunburn is a clear sign that the DNA in the skin cells has been **damaged** by too much UV radiation from the sun³.

You can't feel this UV radiation - the heat from the sun actually comes from infrared rays. This is why people can still burn on cool days³.

Getting painful sunburn, just once every 2 years, can triple your risk of melanoma skin cancer³.

15 to 20
— MINUTES —

of unprotected sun exposure per day, without skin reddening or burning, should be sufficient for most people to produce the required vitamin D levels⁴.

HUMAN SKIN CONTAINS... 

melanin which helps to block damaging UV rays. The darker the skin, the higher the melanin levels⁵.

REMEMBER, IN LARGER DOSES UV LIGHT CAN DAMAGE OUR SKIN

producing burns, skin aging, cell mutations and even skin cancer⁶

¹ [https://www.who.int/news-room/q-a-detail/radiation-ultraviolet-\(uv\)](https://www.who.int/news-room/q-a-detail/radiation-ultraviolet-(uv))

² <https://www.cancer.org/cancer/cancer-causes/radiation-exposure/uv-radiation.html>

³ <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

⁴ <https://www.skcin.org/skinCancerInformation/theVitaminDDebate.htm>

⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3709783/#:~:text=Besides%20the%20creatin%20of%20a,UV%20penetration%20into%20the%20skin.&text=In%20fact%2C%20melanocytes%20can%20be,in%20the%20dermis%20and%20epidermis>

⁶ <https://www.skincancer.org/riskfactors/uv-radiation/>



WHO IS AT RISK?

OUTDOOR WORKERS

OUTDOOR WORKERS HAVE A HIGHER THAN AVERAGE RISK OF DEVELOPING SKIN CANCER⁷

Each episode of sunburn increases the risk of getting skin cancer⁸.

In order to stay protected as much as possible, an average-sized adult should apply at least two tablespoons to cover the body, which equates to a teaspoon on each arm and the face/neck including ears.

VEHICLE DRIVERS

A PERSON SITTING IN A VEHICLE CAN BE AT RISK OF SIGNIFICANT EXPOSURE TO HARMFUL UV RAYS⁹

There are many different types of glass; each provides varying levels of sun protection. Most glass used for windows only provides moderate protection¹⁰, effectively blocking UVB, but not UVA rays⁹, which means that drivers and pilots could be at risk of over exposure to UV¹¹.

When UV levels are 3 and above, it is recommended that those who spend long periods of time in a vehicle use sun protection¹⁰.

WELDERS

UV WELDING ARCS AND FLAMES EMIT INTENSE VISIBLE UV AND INFRARED RADIATION¹²

UV radiation such as that found in a welding arc can burn unprotected skin, just as UV radiation from sunlight can damage the skin. This is true for direct exposure to UV radiation as well as reflections from metal surfaces, walls and ceilings¹².

Sunscreen can be applied to help enhance UV protection, but should not be used as a replacement to proper PPE.

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6130134/#:~:text=The%20main%20findings%20were%20that,significantly%20associated%20with%20G3%20cancers>

⁸ <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

⁹ <https://www.skincancer.org/blog/surprising-danger-planes-trains-automobiles/>

¹⁰ <http://www.cancercouncil.com.au/wp-content/uploads/2013/05/WEB-friendly-final-skin-cancer-and-outdoor-work-a-guide-for-employ-.pdf>

¹¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4476387/>

¹² https://www.ccohs.ca/oshanswers/safety_haz/welding/eyes.html#:~:text=UV%20radiation%20in%20a%20welding,surfaces%2C%20walls%2C%20and%20ceilings.&text=Long%2Dterm%20exposure%20to%20UV%20radiation%20can%20cause%20skin%20cancer



BEST PRACTICE

FOLLOW THE 5 S APPROACH WHEN WORKING OUTSIDE¹³. OVER-EXPOSURE TO THE SUN IS A SERIOUS HEALTH THREAT AND SHOULD BE AVOIDED.

CONTROLLING SUN EXPOSURE IS AN IMPORTANT STEP IN PREVENTING SKIN CANCER

SLIP ON
SUN PROTECTIVE CLOTHING

Encourage workers to keep covered up.

Clothing can be one of the most effective barriers against UV¹³.

SLOP ON
SPF30 SUNSCREEN

Apply SPF30 sunscreen.

Apply to all exposed areas (face, tops of ears, behind ears and arms) 15 minutes before going outside.

RE-APPLY EVERY 80 MINUTES.

SLAP ON
A HAT

Where possible choose a **hat with ear and neck protection¹³.**

SLIDE ON
SOME SUNGLASSES

Ensure they are close-fitting and wrap around¹³.

SEEK SHADE

Encourage workers to take breaks or work in a shaded area wherever possible.

Remind them that they still need to apply sunscreen even when in the shade¹³.



UP TO
30x
 YOUR SKIN'S
 NATURAL PROTECTION

SPF30 RANGE

SPF30 – WE RECOMMEND USING SUN PROTECTION FACTOR 30 SUNSCREEN

- Apply 15 minutes before sun exposure.
- On the average-sized adult, a minimum of 2 tablespoons should be applied (equivalent of 1 teaspoon of sunscreen) to each arm, leg, front of body, back of body, and face (including neck and ears).
- Re-apply every 80 minutes for continuous protection, especially after physical exertion or perspiration.
- Always wear protective clothing, hats and eyewear when exposed to the sun and avoid prolonged exposure.

Stokoderm® Sunscreen *PURE*



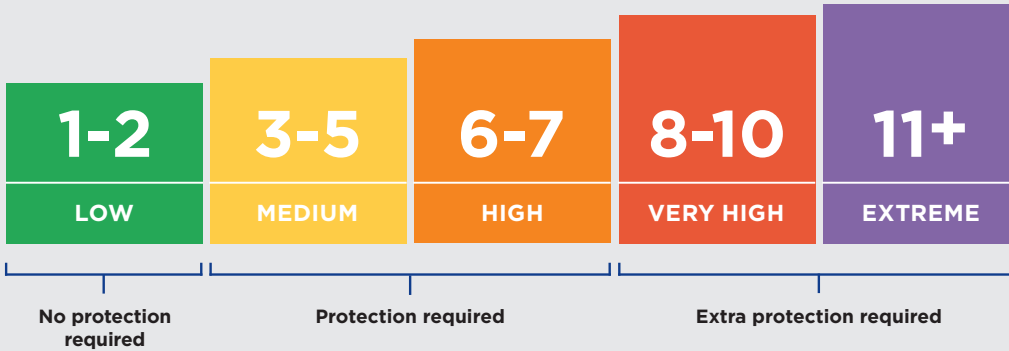
Broad Spectrum SPF 30 Sunscreen for Professional Use UVA | UVB | UVC

- Broad spectrum sunscreen for professional use against UVB and UVA rays.
- Provide protection when exposed to UVC rays created artificially during certain industrial processes, such as arc welding. (Does not replace personal protective equipment).
- Non-greasy after feel to encourage regular use and helps to not affect dexterity with handheld tools.
- Safe to be used by electricians wearing electrical insulating gloves.
- Fragrance-free, dye-free and up to 80 minute water-resistance.
- Made without Oxybenzone and Octinoxate to comply with Hawaii Act No. 104 (2018) and Key West Sunscreen Ordinance



UV INDEX

Adopted by the World Health Organization, the UV Index indicates the UV levels on a daily basis and advises when sun protection measures are required¹⁴.



When the UV index reaches 3 or above, UV protection is required.



TO FIND OUT THE DAILY UV LEVEL VISIT:

www.epa.gov/sunsafety/uv-index-1

¹⁴ [www.who.int/news-room/q-a-detail/radiation-the-ultraviolet-\(uv\)-index](http://www.who.int/news-room/q-a-detail/radiation-the-ultraviolet-(uv)-index)

SPF30

Stokoderm® Sunscreen *PURE* 100ML Tube



Code: SUN100ML
Case Qty: 12

- Ideal for workers on the move
- Handy 100mL tube

Stokoderm® Sunscreen *PURE* 1L Cartridge



Code: SUN1L
Case Qty: 6

- Hygienic, sealed cartridge to prevent ingress of air

Sunscreen 1L Dispenser



Code: SUN1LDS
Case Qty: 15

- Use with Stokoderm® Sunscreen *PURE* 1L cartridge

DID YOU KNOW...?

ULTRAVIOLET (UV) RAYS...



Are carcinogenic (cancerous) to humans



Are not related to temperature



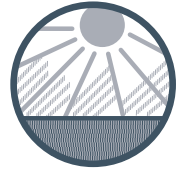
Can pass through loosely woven material



Cannot be seen or felt



Can pass through clouds



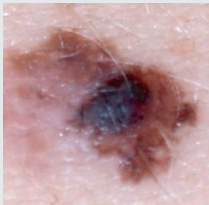
Bounce off reflective surfaces such as metal, concrete, water & snow¹⁴

CHECK YOUR SKIN

Skin cancer is the most common cancer worldwide, and the disease can be divided into two types: melanoma and nonmelanoma skin cancers. While melanomas make up only about 1% of all skin cancer diagnoses, melanomas actually cause the majority of skin cancer deaths. Melanomas and nonmelanoma skin cancers develop in the skin, and while many skin cancers occur in areas of the body that receive a high amount of UV exposure, skin cancers can occur in places that rarely, if ever, receive exposure to UV light.¹⁵

The **ABCDE of melanoma rule** (below) will help you and your workforce remember what to look out for – the example photographs show abnormal moles and melanomas, but they may vary depending on the individual. If any changes or unusual marks are noticed that have lasted more than a few weeks a doctor should be consulted immediately. A melanoma can grow anywhere on the body so it is important to check the entire body regularly (once per month) for any changes or abnormalities¹⁶.

A = ASYMMETRY



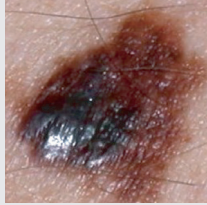
When half the mole does not match the other half

B = BORDER



When the borders of the mole are irregular/ragged or blurred

C = COLOR



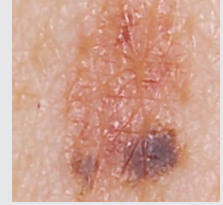
When the colour of the mole varies throughout/no uniform pigmentation

D = DIAMETER



When the diameter is greater than 6mm (but it could be smaller)

E = EVOLVING



Changes in the mole over variable time - weeks, months or years¹⁷

REMEMBER... IF YOU HAVE ANY DOUBT YOU SHOULD CONSULT YOUR DOCTOR¹⁷.

¹⁴ <https://www.skcin.org/skinCancerInformation/solarUVRadiation.htm>

¹⁵ <https://www.kailosgenetics.com/kailos-academy/what-are-signs-and-symptoms-melanoma-and-nonmelanoma-skin-cancer>

¹⁶ <https://www.skincancer.org/skin-cancer-information/melanoma/melanoma-warning-signs-and-images/>

¹⁷ <https://www.bad.org.uk/for-the-public/skin-cancer/melanoma-leaflets/abcd-easy-guide-to-checking-your-moles>