

**SWAAD**  
SUNSAFE WORKPLACE AWARENESS PROGRAM  
**SWAAD**



A GUIDE TO  
CREATING A  
SUN SAFE  
WORKPLACE



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# WORKPLACE HEALTH & SAFETY

# 01

## **Ultra Violet (UV) Radiation is a known cause of workplace injury and disease.**

Under the Workplace Health & Safety Act, a person conducting a business or undertaking (PCBU), must eliminate risks arising from the work environment or if that is not reasonably practicable, minimise the risk as far as is reasonably practicable.

Businesses who employ outdoor workers should therefore develop and implement control measures, including Personal Protective Equipment (PPE) to protect workers from the effects of UV Radiation.

Workers also have a duty of care to take reasonable care for their own health and safety and to not adversely effect the health and safety of other persons.

Workers must comply with reasonable instructions as far as they are reasonably able and co-operate with reasonable Health & Safety policies or procedures that have been notified to workers.

If PPE is provided by a PCBU the worker must, so far as they are reasonably able, use or wear PPE in accordance with the information, instructions and training provided.

A PCBU must manage health and safety risks including risks associated with UVR exposure.



Safe Work Australia - Model Work Health & Safety Bill - 14 April 2022



# Managing the Risk

**UV Radiation is a known carcinogen and is the main cause of skin cancer in Australia.**

When managing the health and safety risks in your workplace, it is important to remember to factor in the risk of UV radiation if your staff work outdoors.

**IDENTIFY** the hazard - Solar Ultra Violet Radiation is a risk to anyone who works outside in direct sunlight. UV Radiation can also be hazardous when reflected off different surfaces like sand, water, glass, concrete, metal, snow etc.

Solar UVR levels are often extreme during the summer months in Australia, but can also be high enough to damage skin in some parts of Australia all year round.

It is important to know what the UV rating is in your area and act accordingly.

**ASSESS** the risk - complete a risk assessment to help you determine:

- Who is at risk?
- How severe is the risk?
- How can you manage the risk?

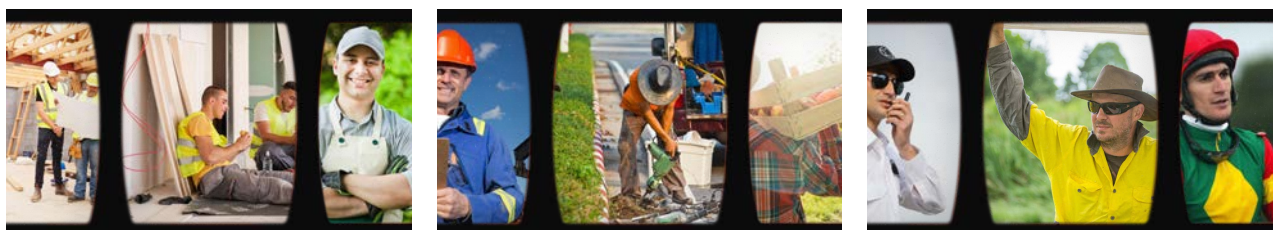
**MANAGE** the risk - eliminate or minimise the risk.

We can't simply turn the sun off, therefore elimination is hard, unless you can move the work indoors away from UVR exposure.

Minimising risk can be managed by planning the day around UV readings so that the outdoor work is done when the UV is lower.

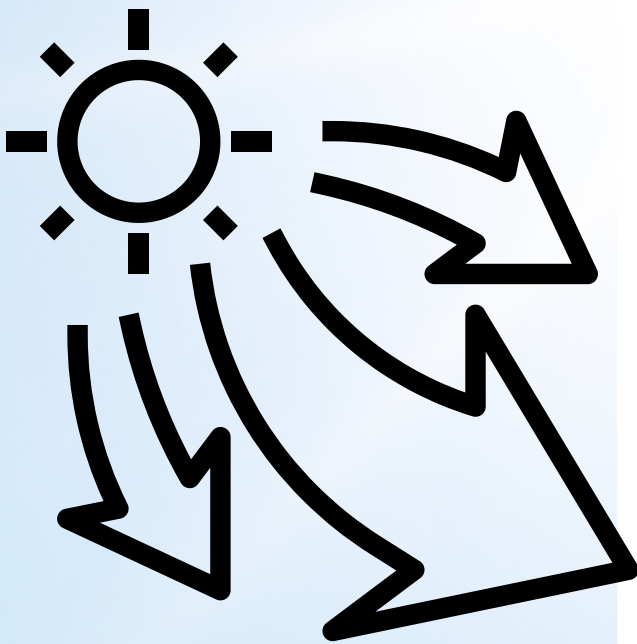
Providing temporary or permanent shade structures can help to minimise risk for jobs that can't be moved indoors. Window tinting in vehicles and altering surfaces to be less reflective and providing Personal Protective Equipment (PPE) to employees will also assist in minimising risk.

Having a Sun-Safe workplace policy and providing employees with relevant training and supervision will assist in UVR risk management for your workplace.



# SOLAR ULTRA VIOLET RADIATION

# 02



Solar Ultra Violet Radiation (UVR) is a type of radiation present in sunlight, as well as in artificial sources such as tanning beds and black lights. UV radiation is classified into three categories based on their wavelengths: UVA, UVB & UVC.

UVA rays can penetrate deep into the skin and cause damage to cells, which can lead to premature aging, wrinkles, and other skin damage, including skin cancer.

UVB radiation is known to cause the majority of skin cancer cases.

UVB is more energetic than UVA radiation and can directly damage DNA in skin cells, leading to mutations that can result in skin cancer.

UVC is almost entirely absorbed by the Earth's atmosphere and does not normally reach the surface.

UV Radiation cannot be seen or felt and is not related to temperature.

The UV reading can be high on cool or cloudy/overcast days.

The table below shows the actual temperature and UV reading on 4 different days in a typical Australian summer.

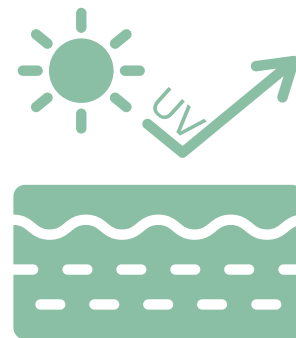
Date in Newcastle	Maximum Temperature Recorded	Maximum UV Index Recorded
24/12/2022	31.1 degrees	11.7
25/12/2022	24 degrees	12.5
26/1/2023	31.5 degrees	11.8
27/1/2023	25.1 degrees	11.7

Historical data obtained from ARPANSA.gov.au, BOM.gov.au

There are several factors that can affect radiation levels. Here are some of the most important ones:

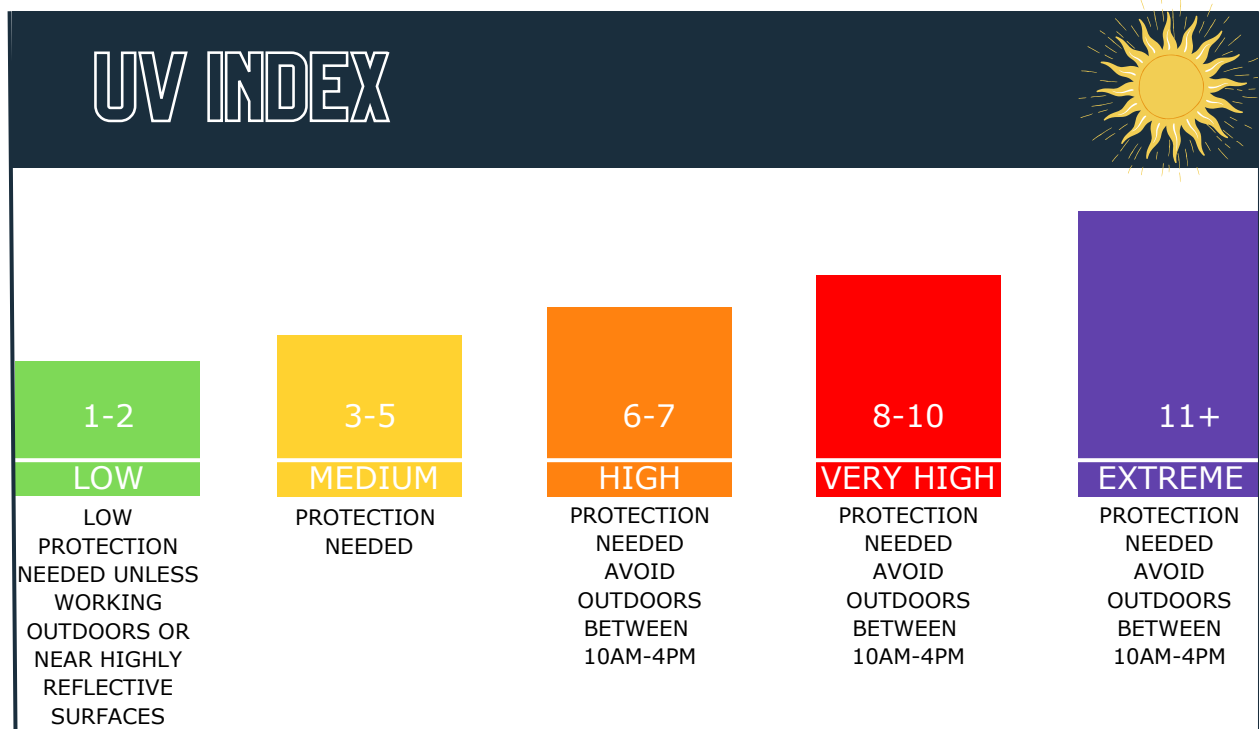
- **Latitude:** UV radiation levels are generally higher closer to the equator.
- **Altitude:** UV radiation levels increase with altitude, because there is less atmosphere to absorb the UV radiation.
- **Time of day:** UV radiation levels are highest during the middle of the day, when the sun is highest in the sky.
- **Season:** UV radiation levels are generally higher in the summer than in the winter.

- **Ozone depletion:** The depletion of the ozone layer can lead to higher levels of UV radiation reaching the Earth's surface.
- **Reflection:** UV radiation can be reflected off surfaces such as snow, water, glass, concrete, metal and sand, which can increase the UV radiation levels in those areas.

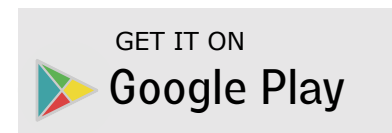
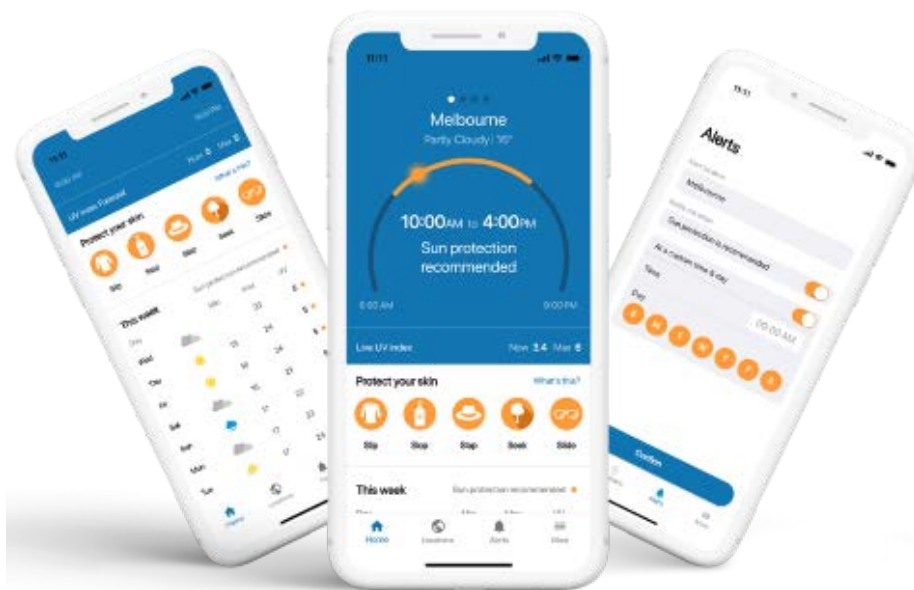


## Measuring UV

The levels of UV are evaluated on a UV Index providing the information required to manage risk.



# Measuring UV made easy



[www.sunsmart.com.au](http://www.sunsmart.com.au)

An initiative of the Cancer Council Victoria, the free SunSmart app puts sun protection advice at your fingertips.

The app provides real time forecast UV levels across Australia and the World giving you the information you need to know when to protect your skin from UV Rays.

The app provides a 7 day forecast of sun protection times and weather information. You can even set it up to send you daily UV and sun protection alerts to help you plan your sun protection needs before you leave home.



# SKIN CANCER RISK

03

It is estimated that 2 in 3 Australians will be diagnosed with some form of skin cancer before they turn 75. The risk of skin cancer is much higher for outdoor workers because their exposure to UV Radiation is substantially higher than indoor workers.

Exposure to UV radiation is the cause of 99% of non-melanoma skin cancers, and 95% of melanomas.

Sunburn, regardless of whether it is serious or mild causes irreversible damage to the skin and eyes. Regardless of skin type, a suntan is a sign of skin damage that contributes to skin cancer and increases risk.

Skin cancer can affect people of all **ages, races, and genders**. However, certain factors can increase the risk of developing skin cancer.

Individuals are generally more susceptible to skin cancer if they have the following:



with



with



Fair complexion including skin that burns or freckles easily, does not tan

Red or Blonde Hair

Green or blue eyes



Having numerous moles



A history of sunburn



Family history of skin cancer





# ELIMINATING & REDUCING RISK

# 04



Reducing the risk of skin cancer when working outdoors requires adopting sun protection measures. Here are some strategies to help eliminate or minimize the risk:

- Download the SunSmart app and know the UV.
- Plan your day around the UV reading.
- Work under shade or a gazebo when possible
- Move the job indoors if possible - especially in the middle of the day when UV is at its highest
- Take lunch and snack breaks in the shade or indoors
- Use Personal Protection Equipment (PPE) when outdoors - ie clothing to cover most of the body, a wide brimmed hat, sunglasses and broad spectrum SPF 50+ sunscreen
- Avoid reflective surfaces like, glass, concrete, sand, water
- Tint vehicle windows to reduce UV exposure



# PREVENTION

# 05

## Slip

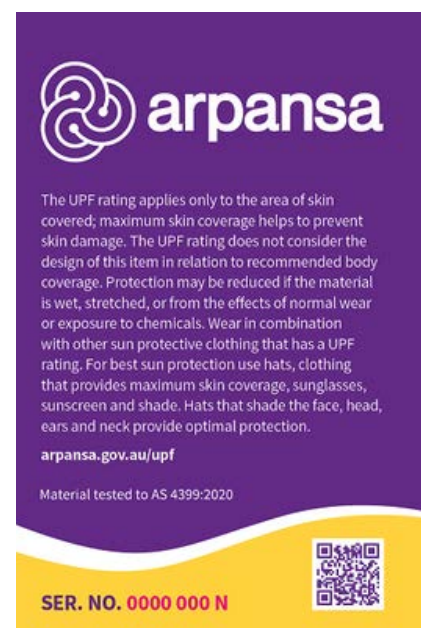
Slip on sun protective clothing including a long sleeved shirt with a collar and long pants to cover as much skin as possible.

When looking for clothing, different fabric types offer different protection levels. The Ultraviolet Protection Factor (UPF) of a material is a measure of how effective it is at sun protection.

In 1990, ARPANSA (Australian Radiation Protection and Nuclear Safety Agency) developed a UPF Certification Scheme. This involves testing materials to determine their ultraviolet radiation (UVR) protective abilities, then labelling products made from those materials with the highly recognised UPF Certification Trade Mark.

This Trade Mark is owned by the Commonwealth of Australia and administered by ARPANSA. ARPANSA may grant use of the UPF Certification Trade Mark on products for which a sample of material of the same type, quality and colour has been tested and has a rating of at least UPF 15.

Consumers can be confident about the amount of ultraviolet radiation blocked by products with the ARPANSA UPF label.



# Slop

Sunscreen plays an important role in staying sun safe, especially when working in or around reflective surfaces.

A **broad spectrum** sunscreen will offer protection against both UVA & UVB radiation. We recommend using a high SPF (sun protection factor) number such as **SPF50+**. The higher the SPF number, the longer the protection. The number after "SPF" represents the multiple of time it would take for your skin to burn compared to not wearing any sunscreen. For example, if your skin typically burns after 5 minutes of sun exposure without any protection, applying an SPF50 sunscreen theoretically extends that duration to 250 minutes (5 minutes multiplied by SPF 50).

It is recommended to **re-apply sunscreen every 2 hours** - more often if swimming or sweating.

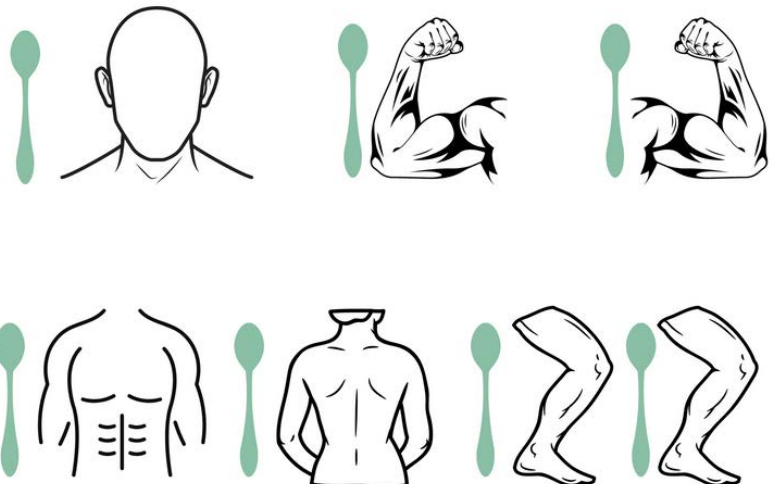
By applying sunscreen **20 minutes before sun exposure**, you allow it to fully absorb and create a uniform layer of protection on your skin. This ensures that the active ingredients in the sunscreen can start working effectively before you are exposed to harmful solar UV rays.



## Are you using enough sunscreen?

It's important to apply a sufficient amount of sunscreen and evenly distribute it on your skin to ensure proper protection.

An average sized adult requires 35ml (7 teaspoons) of sunscreen to cover the body effectively. One teaspoon is required for each limb, one for the front of the torso, one for the back, and one more for the head, neck and ears.



## What is the best sunscreen?

The best sunscreen is simply the one you feel most comfortable using.

### Chemical v Mineral Sunscreen

Chemical and mineral sunscreens are two different types of sunscreens that provide protection against the sun's harmful ultraviolet (UV) rays. They differ in their active ingredients and the way they work to protect the skin.

**Chemical sunscreens** contain organic (carbon-based) compounds. These compounds work by absorbing UV radiation and converting it into heat, which is then released from the skin. Chemical sunscreens are usually transparent when applied and can be easily spread on the skin.

**Mineral sunscreens**, also known as physical or inorganic sunscreens, contain active mineral ingredients like zinc oxide. These minerals work by sitting on the surface of the skin and forming a physical barrier that reflects and scatters UV rays away from the skin.

It's important to note that both chemical and mineral sunscreens can be effective in protecting the skin from the sun's harmful rays. The choice between them often depends on personal preference, skin sensitivity, and specific needs.



## Slap

Slap on a hat. As with clothing, some hats are also available that offer UPF ratings. A wide brimmed hat or legionnaire style that shades the face, head, neck and ears offers the best protection. When selecting a wide brimmed hat, look for one with a brim of at least 7cm. A legionnaire style hat should have a flap that covers the neck and ears.

There are options available to clip on to hard hats to provide sun safety.

## Slide

Sunglasses play a crucial role in protecting our eyes from the harmful effects of UV radiation. It's a good idea to wear sunglasses when outdoors, regardless of the UV level.

In Australia, sunglasses are regulated by the Australian/New Zealand Standard AS/NZS 1067:2003.

This standard specifies the requirements for sunglasses, including their ability to provide UV protection. Sunglasses meeting this standard should be marked with a label indicating the UV protection category, ranging from 0 to 4. Categories 2, 3, and 4 provide sufficient UV protection for general outdoor use, with category 4 offering the highest level of protection.

When selecting sunglasses for UV protection, opt for a pair that fits well and covers a large portion of the eye area. Wraparound styles or sunglasses with larger frames provide better coverage by minimizing the amount of UV radiation entering from the sides.

Remember to wear sunglasses whenever you're exposed to sunlight, not only on bright and sunny days but also during cloudy or hazy conditions, as UV rays can still penetrate cloud cover. Prioritize sunglasses with proper UV protection to safeguard your eyes from the harmful effects of UV radiation.

## Seek

To help reduce your risk, work indoors or under shade if possible - trees, portable or permanent shade structures.

Plan your day so outdoor tasks can be completed during low UV times - early morning, late afternoon.

Take breaks in the shade, preferably indoors if possible.



# EARLY DETECTION

06

Early detection is vital in the successful treatment of melanoma. 90% of melanoma patients experience a complete cure after surgical removal, but only if the melanoma is found and removed early.

It's a good idea to get to know your own skin so you can detect any changes. Check your skin regularly - every quarter is recommended - *change of season, check for change.*

Be sure to check your whole body including your scalp, hands, soles of your feet, between your toes/fingers, armpits, eyelids, toenails and fingernails.

You can access a video on how to check your own skin at [hmf.org.au](http://hmf.org.au).

Consult your Doctor immediately if you notice:

- a new spot
- a spot that is different to others
- a spot or sore that isn't healing
- a spot that has changed in size, shape or colour

**Book** in with a Skin Cancer Doctor, Dermatologist or your local GP for a skin check at least **every 12 months.**



# ONLINE TRAINING

07

**With the support of the NSW State Government, the Hunter Melanoma Foundation have developed SWAP.**

SWAP is a **Sun-Safe Workplace Awareness Program** offering online training to Employees of businesses who predominantly work outdoors and therefore are at greater risk of developing melanoma and other skin cancers.

Melanoma is often referred to as Australia's national cancer because we have one of the highest incidences per capita in the world. It is predicted that 2 in 3 Australians will be diagnosed with some form of skin cancer before age 75.

The risk of developing melanoma is far greater for outdoor workers because they are often exposed to higher levels of UV radiation than the general population. This is because they spend a lot of time outside in direct sunlight, often during peak UV exposure times, such as during the middle of the day when the sun's UV rays are strongest.

Many outdoor workers may not have access to shade or may not be able to work indoors, and may not always wear adequate sun protection, such as hats, protective clothing, sunglasses and sunscreen.

Many more, have little knowledge about the risks associated with exposure to UV radiation or the why, when and how to protect their skin.

This training course is a simple, easy to understand program to provide both employers and employees with the knowledge to protect themselves against exposure to UV radiation as well as the importance of early detection of melanoma.

You can access SWAP via the "Our Programs" section of the HMF Website - **[hmf.org.au](http://hmf.org.au)**

For further information contact **[info@hmf.org.au](mailto:info@hmf.org.au)**





# SWAAP

SUNSAFE WORKPLACE AWARENESS PROGRAM

# SWAAP



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*Working to defeat Melanoma*

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