Cancer Council NSW

Sun Safety for Outdoor Workers: **UV Risk Assessment**

Outdoor workers are at high risk of developing skin cancer because they are exposed to up to 5-10 times more UV radiation from the sun than indoor workers.[1]

On average outdoor workers spend at least 12 hours per week exposed to direct sunlight while at work.[2] Exposure is cumulative, so each time workers are exposed they are increasing their risk of skin cancer. Use this UV Risk Assessment to understand your workers' risk and current practices.

This UV Risk Assessment is designed to help you determine:

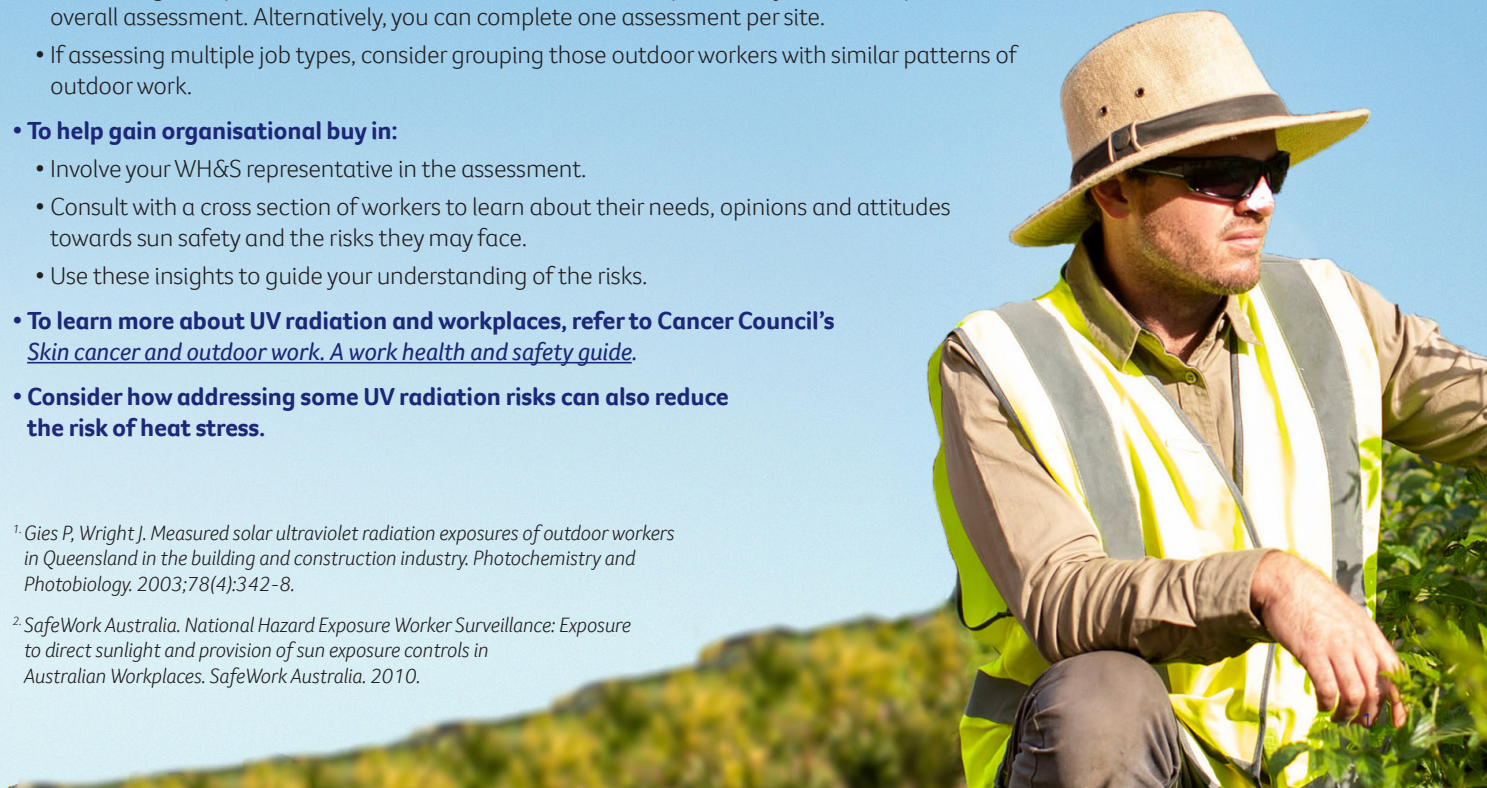
1. where the greatest risk of UV radiation is in your workplace,
2. what sun safety control measures are currently in place,
3. the most important priority areas to guide your Action Plan.

This UV Risk Assessment is intended to help you assess the UV radiation risks present in your workplace, as part of **Step 3 of the Implementation Guide**.

Use this document in combination with the Implementation Guide and the Sun Safety Action Plan.

Tips for completing the UV Risk Assessment:

- **Consider if you will be assessing one or multiple worksites or job types.**
  - If assessing multiple worksites with similar environments and practices, you can complete one overall assessment. Alternatively, you can complete one assessment per site.
  - If assessing multiple job types, consider grouping those outdoor workers with similar patterns of outdoor work.
- **To help gain organisational buy in:**
  - Involve your WH&S representative in the assessment.
  - Consult with a cross section of workers to learn about their needs, opinions and attitudes towards sun safety and the risks they may face.
  - Use these insights to guide your understanding of the risks.
- **To learn more about UV radiation and workplaces, refer to Cancer Council's** *Skin cancer and outdoor work. A work health and safety guide*.
- **Consider how addressing some UV radiation risks can also reduce the risk of heat stress.**



[1] *Gies P, Wright J. Measured solar ultraviolet radiation exposures of outdoor workers in Queensland in the building and construction industry. Photochemistry and Photobiology. 2003;78(4):342-8.*

[2] *SafeWork Australia. National Hazard Exposure Worker Surveillance: Exposure to direct sunlight and provision of sun exposure controls in Australian Workplaces. SafeWork Australia. 2010.*

SITE AESSESMENT DETAILS

Single site ☐ Multiple sites ☐

Name of site(s): _____

_____

Job title(s) assessed: _____

_____

Assessed by: _____ Date: _____ /_____/_____

WH&S representative involvement? ☐ Yes ☐ No

If yes, WH&S representative name _____

1. Identify where the greatest UV radiation risks are in your workplace

Tick the most relevant box to assess your workplace against UV radiation risk.

- These factors are known to contribute to the amount of UV workers are exposed to.
- Some factors contribute more than others, which is emphasised by the points* allocated.
- Some factors may need more than one box ticked. In this case, use the box with the highest points in your subtotals.

Add up each subtotal for environmental, work system and hazardous factors. Once completed, you will have an understanding of the level of risk for each factor, as well an overall level of risk in your workplace.

*Points sourced and adapted with approval from Sun Safety at Work Canada: UV risk assessment: operational review.

1. ENVIRONMENTAL FACTORS

How much time is spent in the sun (including in vehicles without window tinting): UV radiation is highest in middle of the day and during summer months.

☐ All day	15	Very high
☐ 10am-3pm	11	Very high
☐ 3-5pm	7	High
☐ 8am-10am	7	High
☐ After 5pm	5	Moderate
☐ Before 8am	3	Low
☐ At night	0	Nil

Season when work takes place: In NSW UV radiation is high enough to damage unprotected skin at least 10 months of the year.

☐ All year	40	Very high
☐ Summer	40	Very high
☐ Autumn/spring	30	High
☐ Winter	20	Moderate

Altitude of worksite: Higher altitudes have a higher UV rating than lower altitudes. Check the SunSmart App for the UV in your area.

☐ More than 1500m (e.g. Perisher Village*)	8	Very high
☐ 1000-1500m (e.g. Katoomba, Guyra*)	6	High
☐ 500-1000m (e.g. Armidale, Bathurst*)	4	High
☐ Less than 500m (e.g. Sydney, Broken Hill*)	2	Moderate

Latitude: Locations closer to the equator have higher UV radiation levels.

☐ Mid-Northern NSW: (e.g. Orange, Byron Bay*)	8	Very high
☐ Mid NSW: (e.g. Wollongong, Sydney*)	6	High
☐ Southern NSW: (e.g. Wagga Wagga, Eden*)	4	High

** Locations are indicative only. UV radiation is affected by several factors including geographic location, time of day and cloud cover.*

Environmental factors subtotal		
Workplace subtotal	**Score**	**Risk rating**
	>66	Very high
	47-66	High
	<47	Moderate

2. WORK SYSTEM FACTORS

Shade during work: Good quality shade can reduce UV radiation exposure by up to 75% and reduce heat stress.

☐ No shade	10	Very high
☐ Partial shade	5	High
☐ Total shade	1	Moderate

Shade at rest breaks: Providing shaded areas for rest breaks is important to protect staff from UV radiation, heat and rain.

☐ No shade	5	Very high
☐ Partial shade	3	High
☐ Total shade	1	Moderate
☐ Indoor break area	0	Nil

Sunburn from work activities: Sunburn can take 24 hours to show. The more frequent and severe the sunburn, the higher the risk of skin cancer. It also reduces the body's ability to cool, increasing heat stress risk.

☐ Regular occurrence	5	Very high
☐ Irregular occurrence	1	Moderate
☐ No occurrence	0	Nil

Work system factors subtotal		
Workplace subtotal	**Score**	**Risk rating**
	>24	Very high
	8-24	High
	<8	Moderate

3. HAZARDOUS FACTORS

The presence of reflective surfaces or photosensitising substances such as industrial chemicals, drugs, plants, fragrances and some medications will increase the risks posed by UV radiation.

Reflective surfaces: Most surfaces that reflect glare will also reflect UV radiation, and newer or hard, smooth surfaces will reflect more UV than older and softer ones.

☐ Snow, roofing or cladding iron	8	Very high
☐ Sea surf, white house paint, dry beach sand	6	High
☐ Concrete, asphalt, open ocean	4	Moderate
☐ Grass, soil	2	Low

Photosensitising substances: industrial chemicals and plants: Certain substances can increase sensitivity to UV radiation. The product Safety Data Sheet (SDS) can be used to identify any photosensitising substances.

☐ Regular occurrence	10	Very high
☐ Irregular occurrence	1	Moderate
☐ No occurrence / not identified by SDS	0	Nil

Hazardous factors subtotal		
Workplace subtotal	**Score**	**Risk rating**
	>17	Very high
	6-17	High
	4-5	Moderate
	<4	Low

Add up your environmental, work system and hazardous factors sub-totals to get your final score.

Workplace risk scores	
Environmental score	
Workplace score	
Hazardous score	
Overall total score	

Overall workplace risk rating		
Workplace total	**Score**	**Risk rating**
	>109	Very high
	61-109	High
	<61	Moderate

If your overall workplace risk rating is:

Very high: Your workplace setting presents very high levels of UV exposure, significantly increasing your outdoor workers' skin cancer risk. As their employer, you have an obligation to provide a safe environment that protects them from harmful UV rays. Use Section 2 below to review your current safety control measures and identify the gaps you could prioritise in your Action Plan.

High: Your workplace conditions present high levels of UV exposure, substantially increasing outdoor worker skin cancer risk. By assessing your current practices below, consider where you can take action on the most protective control measures first to achieve the biggest reduction in skin cancer risk.

Moderate: Your workplace presents a moderate level of risk to your outdoor workers, resulting in cumulative UV radiation damage. Reviewing your control measures and prioritising new methods of protection in your Action Plan can help to make a difference in reducing their skin cancer risk.

2. Identify what sun safety control measures are currently in place

For each control in the table below, tick to indicate if your workplace is currently practicing, looking to practice, not practicing currently, or is not applicable to your workplace.

UV Radiation Control Measures	Currently practicing	Looking to practice	Not practicing	Not applicable
Policy				
A sun safety policy or procedure	☐	☐	☐	
Engineering controls				
Provide built (portable or fixed) or natural (trees) shade for workers	☐	☐	☐	☐
Provide window tinting in vehicles	☐	☐	☐	☐
Administrative controls				
Schedule outdoor work tasks outside of peak UV radiation times	☐	☐	☐	☐
Rotate workers between indoor/shaded and outdoor tasks	☐	☐	☐	☐
Modify exposure to reflective surfaces (e.g. move tasks to another location, provide shade over surface)	☐	☐	☐	☐
Encourage role modelling of sun safety practices by leadership and management teams	☐	☐	☐	☐
Provide sun safety education and training to staff	☐	☐	☐	☐
Provide sun safety information and resources to remind staff of workplace expectations (e.g. place sunscreen in accessible areas, posters)	☐	☐	☐	☐
Minimise exposure to photosensitive substances	☐	☐	☐	☐
Advise workers to consult their GP if they have concerns about their skin or are taking medication that may cause photosensitivity	☐	☐	☐	☐
Include UV protection requirement in procurement procedures (e.g. UPF 50+ uniform fabric and minimum UVE of 95% for shade)	☐	☐	☐	☐
Personal Protective Equipment (PPE)				
Ensure that the wearing of sun safe PPE is mandatory	☐	☐	☐	☐
Provide a broad-brimmed, bucket or legionnaire style hat	☐	☐	☐	☐
Provide attachable brims and neck flaps for hard hats or helmets	☐	☐	☐	☐
Provide shirt with long sleeves and collar made from UPF 50+ fabric	☐	☐	☐	☐
Provide long trousers made from UPF 50+ fabric	☐	☐	☐	☐
Provide uniform that is designed to keep workers cool yet provide maximum sun protection	☐	☐	☐	☐
Provide at least SPF 30+ broad-spectrum, water-resistant sunscreen and lip balm	☐	☐	☐	☐
Provide wrap-around sunglasses (AS/NZS 1067 or with an EPF of 9 or 10) or safety glasses (AS/NZS 1337.1) marked 'o' for outdoor use	☐	☐	☐	☐

3. Set your sun safety priorities

Reflect on the highest scores from Section 1, your existing controls from Section 2 and consider what can be changed in your workplace. This will help you to identify your priorities for improvement.

EXAMPLE:

If your Risk Assessment indicated challenges with respect to:

PPE non-compliance (like sun safe uniforms or hats):

You might like to consider prioritising policy, administrative controls and PPE that:

- Tighten your policy so that PPE is mandatory.
- Ensure uniforms are specially designed to be lightweight and cool, yet still provide maximum sun protection.
- Reinforce worker expectations by providing education and training, supported by role modelling strategies, and reduce any optional uniform choices that are less sun safe (e.g. cap wearing).

Lack of shade availability:

You might like to consider prioritising policy, engineering and administrative controls to:

- Improve commitment to shade from leadership, accessibility and placement, and encourage its use.

TIP: We strongly recommend you ensure that your workplace UV safety policy is updated as it forms the foundations for all your practical implementation activities.

OUR WORKSITE PRIORITIES ARE *(PLEASE SELECT ALL THAT APPLY)*:

- ☐ **Policy**
- ☐ **Engineering controls**
- ☐ **Administrative controls**
- ☐ **PPE**

You are now ready to develop your **Workplace Action Plan** *(Step 4 of the Implementation Guide).*

Protect yourself in **five ways** from skin cancer

SLIP **SLOP** **SLAP** **SEEK** **SLIDE**

CAN26447 01/22

For further information about completing this UV Risk Assessment, contact Cancer Council NSW on **02 9334 1761** or **sunsmart@nswcc.org.au**.

Cancer Council NSW