Solar UV Exposure Risk Assessment for Outdoor Workers

This information is to support workplaces in assessing if there is a risk of hazardous levels of exposure to ultraviolet (UV) radiation from the sun associated with performing tasks outdoors.

The hazard

Solar UV radiation – The UV index measures the intensity of UV radiation that reaches the earth's surface. The higher the UV index the greater the risk of skin and eye damage. When the UV index is 3 or above workers need to protect their skin and eyes. Values 3 and above are predominantly seen between April – September. The highest UV index values may be during June and July with peak values approaching 8. UV levels are changeable between April – September. Be prepared and check the daily UV index levels at https://www.met.ie/uv-index

Who is most at risk?

- Outdoor workers are at risk from UV exposure but also at risk in heatwaves from high outdoor temperatures. If you work outdoors, you may be exposed to 2-3 times more UV radiation from the sun than someone who works indoors, putting you at high risk of skin cancer.
- Both occasional and chronic sun exposure can be harmful. Exposure causing sunburn is the most damaging but frequent non-burning exposures also significantly increase the risk of skin cancer.
- People with fair or freckled skin that burns easily and does not tan, especially those with red/fair hair and light-coloured eyes. The fairer you are, the quicker you will get skin damage and sunburn when the UV is over 3.
- People with a large number of moles (>50).

What is the risk?

- Sunburn
- Skin Cancer
- Eye Damage
- Heat Exhaustion

Step 1 – Record Work Location Particulars

Project / work location:				
Specific work location:				
Task being assessed:				
Estimated number of workers:				
Estimated duration of works (hours):				
Date/time of assessment:				
Person(s) consulted (e.g. staff member/ safety rep):				
Assessment undertaken by:	**Name:**		**Signature:**	

Step 2 – Determine the UV Exposure Risk

Instructions: The following checklist details measures, which all workplaces should consider prior to commencement of work.

Tick the most likely to apply and add up the number of ticks in each column (for high, medium and low risk categories).

The column with the most ticks indicates the risk category that should be employed for the site. Each category adds to the accumulated level of risk, adding to the overall risk of unsafe UV exposure.

If two risk categories have an equal number of ticks, the higher risk category of the two shall apply.

Where a High or Medium risk column results with the most ticks, control measures should be applied, as per Step 3.

The results of the risk assessment must be documented in accordance with legislative requirements.

	High risk		Moderate risk		Low risk	
What time of day spent outdoors from April to September (including in vehicles without window tinting)?	All/most of the day	☐	9am-11am	☐	Before 9am	☐
	11am-3pm	☐	3pm-5pm	☐	After 5pm	☐
In which month does the work take place?	All year	☐	March and April	☐	October – February	☐
	May, June, July	☐	August and September	☐		
What kind of surface is the work performed on?	Water (Summer)	☐	Water (Winter)	☐	Grass	☐
	White house paint	☐	Snow	☐	Soil	☐
	Sand	☐				
	Concrete	☐				
What level of shade is the work performed under?	No shade	☐	Total Shade	☐	Indoors	☐
	Partial Shade	☐				
What level of shade is provided during breaks?	No shade	☐	Total Shade	☐	Indoors	☐
	Partial Shade	☐				
TOTAL *(The column in total risk assessment with the most ticks indicates the risk category that should be employed for the site).*						

Step 3 – Assess Control Measures In Place / Required

Important Note: Where a High or Medium risk column results with the most ticks at Step 2, control measures should be applied.

Engineering Controls: Is elimination and/or reduction of risk by use of engineering controls practical?		**Details**
• Shade provided (portable, natural or permanent)	Yes ☐ No ☐ N/A ☐	
• Surface can be modified	Yes ☐ No ☐ N/A ☐	
• Window tinting provided in work vehicles (light transmission of 65% is required under roadworthiness testing laws. Visit RSA.ie for more information)	Yes ☐ No ☐ N/A ☐	
Administration Controls: Is elimination and/or reduction of risk by use of administration controls practical?		**Details**
• Work can be rotated between staff to avoid long periods of UV exposure	Yes ☐ No ☐	
• Work tasks and work times can be altered/adapted to avoid high UV exposure	Yes ☐ No ☐	
• Workers can take regular breaks away from the sun	Yes ☐ No ☐	
• Work can be moved into the shade or indoors	Yes ☐ No ☐	
• Shaded work can be done in the middle of the day	Yes ☐ No ☐	
• Drinking water is provided	Yes ☐ No ☐	
• Workers have been advised of risks of UV exposure and associated controls	Yes ☐ No ☐	
Personal Protective Equipment: Is elimination and/or reduction of risk by use of personal protective equipment controls practical?		**Details**
• Workers cover up with long sleeves/collared tops and long pants (use fabrics with a tight weave or rated with an ultraviolet protection factor (UPF) of 50+ recommended).	Yes ☐ No ☐	
• Workers wear wraparound sunglasses meeting EN 170/EN172 standards	Yes ☐ No ☐	
• Workers wear wide brimmed/bucket style hats or brim/neck flap attachments for hard hats	Yes ☐ No ☐	
• Workers wear broad-spectrum, water resistant, factor 30+ sunscreen and reapply often	Yes ☐ No ☐	
• Workers wear lip protection	Yes ☐ No ☐	
Additional Controls		**Details**
•	Yes ☐ No ☐	

Step 4: Actions

No.	Actions	Person responsible	Action date
1			
2			
3			
4			
5			

For More Information

For more information on how to strategically address skin cancer prevention among outdoor workers click here for each resource:

- HSA BeSMART.ie Free Safety Management and Risk Assessment Tool
- SunSmart audit tool for skin cancer prevention in outdoor workers
- SunSmart framework for skin cancer prevention in outdoor workers
- SunSmart sample terms of reference for skin cancer prevention group
- SunSmart Survey for skin cancer prevention in outdoor workers
- Tools and resources for skin cancer prevention in outdoor workers