Skin cancer and outdoor work

A guide for employers
Skin Cancer and Outdoor Work: A Guide for Employers
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Introduction
Employees who work outdoors for all or part of the day are at risk of skin cancer. This is because solar radiation is carcinogenic to humans. All skin types can be damaged by exposure to solar ultraviolet radiation (UVR). Damage is permanent and irreversible and increases with each exposure.

Under Australian occupational health and safety legislation, employers should be considering steps to reduce this risk and protect employees from ongoing exposure to solar UVR that can lead to skin cancer.

Implementing a comprehensive sun protection program, which includes a range of simple protective measures, can prevent sun-related injuries and reduce the suffering and costs associated with skin cancer – including reduced productivity, morale and financial returns.

Occupations especially at risk due to the outdoor nature of the work include:

- building and construction workers
- telecommunications and utilities workers
- swimming pool and beach lifeguards
- police and traffic officers
- agricultural, farming and horticultural workers
- landscape and gardening workers
- fisheries workers
- road workers
- municipal employees
- postal workers
- dockyard, port and harbour workers
- catering workers
- outdoor events workers
- physical education teachers and outdoor sports coaches
- surveyors
- forestry and logging workers
- ski instructors and lift operators
- mining and earth resources workers
- taxi, bus and truck drivers and delivery and courier services
- labour hire company workers.

Purpose of this resource
This booklet explores the relationship between exposure to solar UVR and skin cancer. It provides you with information and advice to understand and confidently address sun protection in the workplace.

A comprehensive sun protection program is described, including various sun protection control measures presented as per the hierarchy of occupational hazard controls. Tips for success are included, along with a sample policy to assist with the development and implementation of your program.
THE CASE FOR SUN PROTECTION AT WORK

Australia has the highest rate of skin cancer in the world. Despite being almost entirely preventable, skin cancer continues to affect at least one in every two Australians in their lifetime.

The amount of exposure required to cause skin cancer varies greatly from one person to another. However, in most people the risk of skin cancer increases with increasing amounts of exposure to the sun.

The workplace is a major source of exposure for many adult Australians. It is not surprising that outdoor workers who are required to spend long periods of time working in the sun, year after year, have a higher than average risk of skin cancer.

The harmful health effects of solar ultraviolet radiation

Exposure to solar ultraviolet radiation (UVR) is known to cause adverse health effects on the skin, eyes and immune system.

Sunburn

Sunburn is a radiation burn to the skin. In Australia, sunburn can occur in as little as 15 minutes on a fine January day. All types of sunburn, whether serious or mild, can cause permanent and irreversible skin damage and can lay the groundwork for skin cancer later in life.

Mild sunburn that reddens and inflames the skin is known as first-degree sunburn. Second-degree sunburn occurs with more serious reddening of the skin and water blisters. Third-degree sunburn requires medical attention.

Solar keratoses and premature ageing of the skin

Solar keratoses are red, flattish, dry, scaling areas on the skin, sometimes called sunspots. Sunspots are a warning sign that a person is prone to skin damage and skin cancer.

Most visible signs of ageing are the result of damage to the skin caused by exposure to solar UVR. This can include skin wrinkling, loss of elasticity, irregular pigmentation and altered skin texture.

‘People whose jobs involve a lot of time in the sun are at high risk of developing skin cancers, and employers have a responsibility for minimising hazards in the workplace.’

– WorkSafe WA Commissioner Nina Lyhne (February 2006)
Eye damage
Acute effects of exposure to solar UVR on the eye include photokeratitis (inflammation of the cornea and the iris) and photoconjunctivitis (inflammation of the conjunctiva, the membrane that lines the inside of the eyelids and white of the eye), more commonly known as snow blindness or welder’s flash. Symptoms range from mild irritation to severe pain.

There is evidence that chronic exposure to solar UVR contributes to age-related macular degeneration and cataracts, both a cause of blindness. Long-term effects may also include pterygium (white or creamy opaque growth on the cornea), squamous cell carcinoma of the conjunctiva and cancer on the skin surrounding the eye.

Skin cancer: the facts
The most serious health effect of exposure to solar UVR is skin cancer.

Our body is made up of tiny building blocks called cells. Cells normally grow, divide, die and are replaced in a controlled way. Cancer is a disease that occurs when the cells of the body are damaged, causing them to grow out of control.

The skin is the largest organ of the body. Skin cancer can grow when the cells that make up our skin are damaged. In most cases, this damage is caused by overexposure to solar UVR.

The top layer of the skin contains three different types of cells: basal cells, squamous cells, and melanocytes. Skin cancer types are named after the type of skin cell in which the cancer develops.

The three types of skin cancer are:

1. Basal cell carcinoma (BCC) is the most common type of skin cancer. It grows slowly over months and years and may damage nearby tissues and organs if left untreated.
2. Squamous cell carcinoma (SCC) is less common but grows faster. It may spread to other parts of the body if left untreated.
3. Melanoma is the least common but most dangerous type of skin cancer. Most skin cancer deaths are from melanoma. It is often fast growing and can spread to other parts of the body where it can form a new cancer.

Basal cell carcinomas and squamous cell carcinomas are often grouped together and called non-melanoma or common skin cancers.
Skin cancer: an occupational disease priority area

Skin cancer can be an employment-related disease resulting from repeated and long-term exposure to a known carcinogen. Skin cancer therefore fits within the national health and safety priority action area of preventing occupational disease more effectively.

The 2006 Report on indicators for occupational disease highlights there was an increase in skin cancer claims per million employees/persons over a six-year period to 2004. The report says that given the long latency period associated with exposure and the onset of skin cancer, it is also likely that compensation claims greatly understate the real incidence of occupational skin cancer.

Legal obligations

Occupational health and safety legislation, specific to each Australian state or territory, has the clear objective of preventing illness and injury at work and saving lives.

All employers must protect employees by providing a safe working environment that is free of health risks. This includes taking proper steps to reduce the known health risks associated with exposure to solar UVR for workers who spend all or part of their time working outdoors.

Employees also have a duty to take care of their own health and safety and cooperate with employers’ efforts to improve health and safety. To work safely in the sun, employees must follow workplace sun protection policies and procedures, attend

DID YOU KNOW?

Sun exposure is the cause of about 99% of non-melanoma skin cancers and 95% of melanoma in Australia. A very small number of skin cancers are due to genetic predisposition. Both melanoma and non-melanoma skin cancers can appear anywhere on the body, not just sun exposed areas.
training and follow instructions and advice provided, and use supplied protective equipment as instructed.

Other key documents providing technical advice and guidelines on sun protection for outdoor workers include:


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**Industry warned by skin cancer judgment**


The Workers Compensation Commission issued a milestone decision by awarding damages to an employee of the Roads and Traffic Authority of NSW for continuous, excessive exposure to the sun while at work resulting in multiple skin cancers.

Robert Ritchie suffered significant damage to his skin while employed as a labourer with the Authority for 34 years. He has had numerous procedures to remove skin cancers from his ears, abdomen, cheeks, back, arms, legs and neck.

Mr Ritchie resigned from the Authority for health concerns in 2003. He filed a claim with the Workers Compensation Commission based on having ‘suffered a partial incapacity to work and suffered an injury that arose out of and in the course of his employment.’ Mr Ritchie also stated that his injury could be further aggravated by exposure to sunlight.

The Commission determined that Mr Ritchie’s employment substantially contributed to his injury, and awarded him weekly compensation at the maximum statutory rate, medical expenses and costs.

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**Skin cancer judgment a wake up call to industry**

15 August 2003 (SunSmart Victoria Program Media Release)

The verdict delivered in a landmark hearing against Boral Bricks today highlights the importance of sun protection in the workplace, according to The Cancer Council Victoria.

A judge in the County Court today found that skin cancer is considered ‘serious’ and ‘dangerous’ enough for Eric Reeder, a retired truck driver, to sue his employer of 35 years for damages.

Mr Reeder has developed multiple skin cancers on his back, neck and shoulders and has had malignant melanomas removed from his back. He has to undergo regular treatment to remove multiple skin cancers.

SunSmart Campaign Manager, Craig Sinclair, said, ‘Mr Reeder’s case is the first court case in Victoria to establish that skin cancer can be a serious occupational injury. This ruling is very significant and is a wake up call to all industries that employ outdoor workers … This case puts sun protection on the agenda with other well known occupational health and safety issues.’