POSITION STATEMENT
SUN PROTECTION IN THE WORKPLACE

Recommendations

The Cancer Council Australia recommends that workplaces have a comprehensive sun protection strategy that includes:

1. Periodic assessment of the exposure risk, protective equipment and clothing requirements for all employees.
2. The introduction and maintenance of protective measures in line with occupational hazard controls :
   a) Providing shade for shelter from direct sunlight or relocating tasks to shaded areas.
   b) Rescheduling work that requires exposure to direct sun to times with less UV intensity (that is, before 10 am and after 3 pm).
   c) Requiring the use of protective clothing and equipment (for example collared, long sleeved shirts, trousers or long sleeved overalls, broad brimmed/bucket hats or hard hat brim attachments, sunglasses that comply with standard AS 1067, broad spectrum SPF 30+ sunscreen).
3. Providing training for all employees, supervisors and managers to increase their knowledge of the effects of UV radiation, the importance of the sun protection strategies and the benefits of early detection and skin self examination.
4. Documenting sun protection strategies in a written policy. Employers and employees should work together to develop this policy, which should include a process to monitor compliance.

Introduction

Exposure to ultraviolet (UV) radiation from the sun causes skin and eye damage and is also the main cause of skin cancer in Australia. The amount of sun exposure required to cause skin cancer varies greatly from one person to another, depending on skin type and probably other inherited characteristics.

However, in most people the risk of skin cancer increases with increasing amount of exposure to the sun.

In addition, the pattern of sun exposure is important for melanoma and probably basal cell carcinoma (BCC), as short bursts of intense sunlight increase the risk of both cancers.[1] Programs that aim to reduce exposure to UV radiation are important if skin cancer incidence and death rates are to be reduced.[2]

Sun protection programs in the workplace are important for the following reasons:

- Outdoor workers, both full-time and part-time, have a higher than average risk of BCC and squamous cell carcinoma (SCC) because they often spend long periods of time in the sun, all year round, over many years of working life.
- Indoor workers have a higher than average risk of melanoma because they spend most of the week inside but are exposed to short bursts of intense sunlight on weekends and during holidays.
- Sun protection as a workplace issue is covered by Occupational Health and Safety legislation in each state/territory. It provides an established framework through which to implement sun protection policy and practices.
- Workplaces provide settings for ongoing, long term sun protection programs.
- Workplaces can sometimes facilitate access to high risk and hard to reach groups.
- Workplaces offer opportunities to implement changes to workplace environments that have long lasting effects.

Occupational Health and Safety legislation, specific to each Australian State, ensures that workplaces support sun protection programs. The relevant Acts state that employers have a duty of care towards employees to ensure their health, safety and welfare. As UV radiation from the sun is an occupational hazard for all employees who spend any of their working day outdoors, employers are required to protect employees from sun exposure by implementing appropriate control measures. Once an employer provides these measures the employee is obliged to follow them.

A risk assessment can be used to identify work situations where employees are exposed to the sun. Factors that influence UV exposure within the workplace to consider include:

- Work tasks and/or breaks where exposure occurs
- The total amount of exposure occurring over the course of the day:
  Exposure to the sun's UV radiation can occur in a single ongoing episode or as a series of episodes, which add up over the day
- Times of the day when employees are exposed:
  UV radiation is most intense between 10 am and 3 pm when the sun is more directly overhead and the distance sunlight has to travel through the atmosphere is shortest.
- Existing sun protection available
- Reflective surfaces:
  UV radiation can reflect from surfaces such as shiny materials, light coloured concrete and paintwork, reflective building glass, corrugated steel, aluminium roofing, sand, water, some soils and even grass.
- UV radiation and glass:
  Vehicle glass offers some protection from UV radiation. However if the workplace requires long periods of time in the car, extra protection should be taken to reduce exposure. Please refer to The Cancer Council Australia's position statement entitled *'Tinting of car glass and window glass for protection against solar ultraviolet radiation'*.

- Photosensitising substances:
  Some substances can cause the skin to be more sensitive to UV radiation, which can in turn worsen the adverse health effects of exposure. In some occupations, the risk from exposure to particular photosensitising chemicals is severe. To determine whether a chemical has photosensitising qualities ask the manufacturer for a copy of the material safety data sheet which provides information on hazards associated with the use of the chemical and safety measures.
- Season, latitude and altitudes:
  The time of the year and the latitude of where you are working make very significant differences to UV radiation levels. UV radiation levels are more intense during the summer months and the closer you are the to the equator. In relation to altitude, the intensity of UV radiation increases around 4% with every 300m rise above sea level. Therefore working at higher altitudes will increase levels of UV radiation exposure significantly.
- Exposure to artificial sources of UV radiation including:
  - Electric and plasma arc welding and cutting tools
  - Gas or vapour pressure discharge lamps used in lighting, curing paint, inks and other materials
  - Bacterial and fungicidal cabinets and lamps
  - Solariums and ultraviolet lamps
  - Some molten metal presses

Once the risk has been assessed employers, employees and employee representatives should work together to make the changes to minimise risk.

Strategies to reduce risk may include:

- Increasing the amount of shade provided and used in the workplace:
  Wherever possible carry out work in the shade of trees or buildings, move jobs to shaded areas, use portable shade and/or erect permanent shade structures.
- Modifying reflective surfaces
- Rescheduling work:
  UV radiation is strongest from 10 am to 3 pm. If possible, schedule outdoor work outside these times.
- Rotating employees:
  If possible, alternate employees between indoor and outdoor tasks.
- Personal protection:
  Cover as much skin as possible by wearing sun protective clothing, hats, sunscreen and sunglasses when working in the sun.
- Education:
  Provide employees with information outlining the hazards of UV radiation and protection measures to be used. Display warning signs to remind workers of the risk.

References

1. Armstrong BK, Kricker A and English DR. Sun exposure and skin cancer. *Australasian Journal of Dermatology* 1997; 38(Supp), S1-S6.
2. National Health and Medical Research Council. Primary prevention of skin cancer in Australia. Report of the Sun Protection Programs Working party. Canberra: NH&MRC, 1996.