Sun safety

Workers who spend a lot of time in the sun risk developing skin cancer, other skin disorders, eye injuries, heat stress and heat related illness. Queenslanders have the highest rate of skin cancer in the world so it is important that workers are protected against harmful ultraviolet radiation (UVR) exposure.

UVR is the part of sunlight which causes sunburn and skin damage. Damage to the skin occurs as soon as skin is exposed to UVR. Sunburn is the extreme of this damage. The effects of UVR are cumulative so the damage is building up even without burning. Given we live in Queensland, we need to take sun protection measures all the time.

- You are at risk of skin damage when the UV Index is 3 or above (source: Queensland Health).

Apart from working in direct sun in the middle of the day, there are additional factors for particular workers e.g. schools officers, P.E. teachers, staff on playground or bus duties, that increase the risk of skin damage and heat related illness. These include:

- workers with fair skin
- workers not acclimatised to the climate
- workers exposed to water, construction materials, polished materials and glass
- workers carrying out strenuous tasks or work that is sustained for long periods
- workers who are exposed to additional heat from machinery
- workers in northern parts of Queensland.

The sun and its health effects

You do not have to get sunburnt to damage your skin. Sun damage can occur on cloudy days. You are at a high risk of developing skin cancer if you live in Queensland.

Skin cancer

Skin cancer can be deadly. Generally it develops as a result of years of over-exposure to the sun. The types of cancer are basal cell carcinoma, squamous cell carcinoma and malignant melanoma. Sunspots are not a form of cancer but they do indicate excessive exposure to solar UVR.

Skin conditions

Solar UVR can also cause skin conditions such as sunburn, premature skin aging, lasting skin damage and photosensitivity.

Eye injuries

The eye lens and cornea can be damaged by solar UV rays. Both short term and long term injuries may occur.

Heat-related illnesses

Very hot and extreme heat conditions can lead to heat related health problems. Types of illnesses include heat cramps, heat exhaustion, heat stroke, prickly heat and fainting.

Control measures for minimising exposure

About 50% of UVR reaches you directly from the sun while the remaining 50% of UV is scattered about the sky and reaches you indirectly from reflecting surfaces such as sand, concrete and water. It is important that you use measures to ensure that exposure to UVR is minimised.

There are a broad range of sun protection measures and it is recommended that your school/workplace investigates the most appropriate methods to minimise your exposure to UVR. Examples of ways to control exposure are included below.

Work organisation

- Schedule outdoor work for the early morning or late afternoon to avoid peak exposure.
- Rotate tasks that use natural or artificial shade with tasks that are in the sun.
- Plan work around the movement of the sun; work on the western side of a building in the morning and the eastern side in the afternoon.
- If possible, do not work in an environment heated by several sources.
- Mechanise physically demanding tasks.
- Follow doctor's advice before working in hot conditions if you are on medications such as sedatives, tranquillisers, antidepressants, amphetamines, antispasmodics, diuretics or medication affecting blood pressure.
- Have a plan in place for treating heat-affected workers. Have a first aid kit handy.
- Have a plan in place to ensure staff (especially those working alone) have a mobile phone or other system to call for assistance if required.
    - For example, Admin should be aware of the schools officer's daily routine to ensure that they are not left unnoticed if unwell.

Sunscreen

- Use a recommended sunscreen on unprotected areas of skin. The best type is a SPF30+, broad spectrum and water resistant sunscreen.
- Test sunscreen on a small patch of skin if using a new brand for the first time.
- Store sunscreen in a cool dry place.
- Apply sunscreen to clean dry skin at least 20 minutes before being exposed to UVR.
- Follow the instructions on the pack about reapplication; reapply more if sweating.
- Keep receipts for the purchase of your hat, sunscreen etc to claim on your tax or discuss options with your school for reimbursement.

Shade

- Use trees, buildings and other temporary structures for shade.
- Spend meal and rest breaks in the shade.
- Use appropriate materials for temporary shade structures.
- Plant suitable trees in clumps to provide effective natural shade.

Clothing

- Purchase clothing with an ultraviolet protection factor (UPF). The higher the factor, the higher the level of protection.
- Wear loose-fitting shirts with collars and long sleeves.
- Wear loose-fitting long pants, or at least knee-length skirts or shorts.
- Wear clothing that is darker in colour.
- Wear clothing that has a tight weave fabric.
- Specification for the purchase of sun-smart clothing

Hats

- Use broad brim hats with a brim of 10-12cms.
- Legionnaire style hats provide high protection.
- Note: there are hat designs that can be worn with ear muffs.

Sunglasses

- Choose sunglass lenses that eliminate UVR and meet Australian Standard AS/NZS 1067:2003.
- Choose a style of frame that fits close to your face or wrap-around style of sunglasses.

- Choose sunglasses that have a high eye protection factor rating. The rating is on a scale of 1-10, 10 being the highest protection level.
- Choose lenses that decrease visible light to a comfortable level and allow adequate vision.

Hydration

- Drink 150-200 ml of fluid every 15-20 minutes, rather than consume large volumes infrequently.
- Choose water over other beverages.
- Increase your intake of fluids if your urine is dark (normal colour is pale yellow).
- If you suffer dehydration, resume work when you are fully hydrated.

Training

- Be trained in the correct use of PPE.
- Know how to self-screen for skin cancers.
- Implement a 'buddy system' if possible where workers in hot environments look out for early signs of heat illness in their workmates.
- Implement an acclimatisation program that gradually adjusts work loads for new workers and those returning from holidays.
- Include sun safety information in induction.

Early detection

- If you notice a new spot or a freckle or mole that changes in size, shape, colour or texture see your doctor.
- If you have any concerns about your skin, or skin cancer discuss these with your doctor.

Further information

- Managing excessive heat in schools
- WorkSafe Qld Solar ultraviolet radiation - Managing the risks
- Sun safety in state schools procedure
- 5 ways to be sun safe
- Sun safety and skin cancer
- Specification for the purchase of sun-smart clothing
- Personal protective equipment