



**UV Risk Reduction:  
A Planning Guide for Secondary School Communities**

National Skin Cancer Steering Committee  
Secondary Schools Working Group  
on behalf of The Cancer Council Australia

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All material can be copied freely.

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## Why we should be concerned about UV exposure

Australia has the highest incidence of skin cancer in the world. Overexposure to ultraviolet radiation from the sun during childhood and adolescence is known to be a major cause of skin cancer, and sun protection strategies are an essential part of the Australian way of life.

In this document, 'ultraviolet radiation' is generally abbreviated to 'UV'.

### UV radiation

UV is the form of solar radiation that causes sunburn, skin cancer and other long-term skin damage (wrinkles, blotches and other signs of ageing). UV does not feel warm and cannot be seen, but can cause sunburn in as little as 12 minutes in some regions of Australia.

The period of greatest risk is two hours either side of solar noon, when the sun is directly overhead. Specific times vary between States/Territories but are generally between 11 am and 3 pm. Protection from UV is required all year round in most parts of Australia. Check the recommendations for your area with your State/Territory cancer organisation.

Schools have the potential to reduce students' UV exposure and future risk of developing skin cancer for the following reasons:

- students are at school throughout the high-risk period five days a week
- the crucial period for sustaining damaging levels of UV exposure occurs during the school years
- schools, in partnership with families and their communities, can play a significant role in reducing exposure and changing behaviour through policy, education and role modelling.

School communities have a responsibility to implement skin cancer prevention strategies in the interests of student and staff health and welfare. However, strategies must be realistic and practical in the context of the school's environment and circumstances, taking into account factors such as staff workload and the cultural composition of the school community. It is best to begin with simple, achievable measures that can be readily implemented and gradually improved upon over time, rather than attempt to do too much too quickly.

Many school systems have guidelines concerning exposure to UV—it is recommended that these be considered in the development of your school community's skin cancer prevention strategies.

# Legal issues in relation to UV

## **Duty of care for students**

In general, duty of care refers to the need to protect students against foreseeable harm. Sunburn is a foreseeable outcome of exposure to the sun and there is now considerable evidence linking UV exposure, particularly during childhood and adolescence, to the development of skin cancer.

Any activity that involves students being outdoors for any period of time should be seen as potentially placing them at risk of sunburn, skin cancer and other skin damage.

Legal action has occurred in some States as a result of students being sunburnt during school-organised activities, particularly all-day events and excursions. It should also be remembered that skin damage may occur without any sign of sunburn.

## **Occupational health and safety**

Exposure to UV radiation has been recognised as an accepted occupational hazard for people who spend all or part of their working days outside. Occupational health and safety (OHS) legislation varies from State to State and you are advised to contact your OHS authority for further advice.

One useful source of information is an advisory document produced by Worksafe Australia: National Occupational Health and Safety Commission, No 3012 *Guidance Notes for the Protection of Workers from Ultraviolet Radiation in Sunlight*, Australian Government Publishing Service, 1991.


This booklet includes information in relation to outdoor workers about:

- the adverse short and long-term health effects of solar radiation
- employer and employee responsibilities in relation to prevention
- exposure assessment
- control strategies.

While the guidance note does not have any legal force, it is increasingly accepted as a national standard.

The relevant statements from the guidance note regarding employer and employee responsibilities are as follows:

- “3.1 Occupational health and safety legislation in Australia requires employers to provide and maintain, as far as is practicable, a working environment that is safe and without risks to health. This is the employer’s general duty of care.
- 3.2 Employees are required to comply with all instructions given by their employer for reasons of health and safety and take reasonable precautions to protect themselves and others at work.
- 3.3 Employers should consult with employees and employee representatives in the assessment of exposure to solar UV radiation, the development of safe working procedures and other control measures.”



The Australian Council of Trade Unions (ACTU) has developed a relevant standard and code of practice (*Occupational Health and Safety Standard. Prevention of Occupational Skin Cancer and other Ultraviolet Radiation Hazards: Outdoor Workers 1989*). The ACTU recommends the use of this standard by State Branch members in pursuing occupational health and safety regulations at State level, and is also seeking to develop relevant national standards. A booklet summarising the standard and code of practice can be purchased from your local ACTU office.

## Deciding between a policy or plan

Implementation of an effective UV risk reduction policy or plan enables school communities to minimise the danger of excessive exposure to UV for students and staff. If this is your first attempt at tackling UV risk reduction, your school may choose to develop a plan that can be implemented in stages, rather than immediately introducing a comprehensive policy. Schools that already have a range of strategies in place may prefer to proceed to policy development—this may involve documenting existing measures, introducing new measures, or both.

Try to involve representatives from all sectors of the school community, including students—it is important that everyone has the opportunity for input if you are to secure support for your strategies. A key element of the planning process is an education campaign to inform the school community of what you are trying to achieve and why. Your State/Territory cancer organisation can supply materials such as posters, curriculum resources and Fact Sheets.

Once your policy or plan is complete, promote it through your school newsletter and publish it where it is readily accessible for everyone—student diaries and handbooks, staff handbooks etc. Ensure new staff members, students and parents understand what is expected and reinforce the message through regular reminders in newsletters, meetings and assemblies, especially at the beginning of each term.

The framework and tip sheets that follow are intended to assist you in the development of a policy or plan to minimise UV exposure for members of your school community. They could be used as an activity for a staff or committee meeting or as the basis for a professional development session.

# The UV risk reduction framework

## How to use the framework to develop a UV risk reduction policy or plan

This section provides a basic framework to assist you in developing your policy or plan. The framework contains the following sections:

### **Rationale**

The rationale has general relevance. You may wish to modify it for your school's policy or plan.

### **Objectives**

Some examples of possible objectives for your school's UV risk reduction policy or plan are provided. You may wish to modify, delete or add to these examples and/or to distinguish between short and long-term objectives, particularly if this is your first policy or plan.

### **Implementation**

The framework provides seven headings, representing key categories of UV risk reduction strategies, and examples of possible strategies for each category. Note that these are just examples—they are not intended to indicate the most appropriate measures, as this will vary from school to school. Each heading corresponds to one of the tip sheets that follow. You may also decide to focus on just one or two headings or kinds of strategies, or adopt a broader approach.

### **Monitoring and evaluation**

A commitment should be made to review your policy or plan regularly. It is recommended that this occur at intervals of no more than two to three years. A framework is provided to assist you in this process.

### **Tip sheets**

Seven tip sheets have been developed to provide you with a starting point for each heading in the framework. Each tip sheet provides relevant background information and a range of possible strategies, but these lists are not exhaustive and you may choose to develop alternatives. If you require additional information for any category, contact your State/Territory cancer organisation. Some States/Territories may also provide case studies of schools that have successfully implemented UV risk reduction policies or plans.

### **Curriculum activity ideas**

Use these ideas as starting points to develop your own classroom activities.

### **Accreditation**

Some States/Territories offer accreditation (for example, the SunSmart Schools Program) or other form of recognition to schools that implement an approved UV Risk Reduction Policy. Such schools are considered to be examples of best practice in the area of UV risk reduction. Contact your State/Territory cancer organisation for further information.



## The framework

### Rationale

Australia has the highest rate of skin cancer in the world, creating huge social and economic costs. However, it is estimated that at least 75 per cent of all skin cancers could be prevented by protecting skin from the sun during childhood and adolescence.

This UV risk reduction policy or plan has been developed to reduce the risk to students and staff of overexposure to UV radiation from the sun. It is to be implemented throughout the year, but with particular emphasis from September to April.

### Objectives

- Increase student and community awareness of skin cancer and other skin damage caused by exposure to UV radiation.
- Assist students to develop strategies that protect their skin from the sun.
- Work towards a safe school environment that provides shade and other sun protective measures for students and staff.
- Encourage all members of the school community to protect their skin from UV at all times, but particularly at high-risk times such as lunchtimes, sport, excursions and camps.
- Ensure that parents are informed of the school's UV Risk Reduction Policy or Plan.

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*(modify according to your school's specific objectives)*

### Implementation

#### A Shade (see *Tip Sheet A*)

- evaluate use of current shaded areas and areas where students congregate at peak UV periods, particularly lunchtime for example, assign as a student project, observational study by yard duty teachers

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#### B Organisation of outdoor lessons and breaks (see *Tip Sheet B*)

- require students to use shaded areas while waiting to participate in activities during sports and physical education lessons
- shorten lunchtimes and have a longer morning break

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#### c All-day events (see *Tip Sheet C*)

- ensure that competitors' marshalling areas are shaded throughout sports carnivals

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D Curriculum/School Programs (see *Tip Sheet D*)

- incorporate lessons on UV radiation risk reduction in Year 9 Science and Health (for example, using The Cancer Council Australia's *'Timebomb'* resource)

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E Clothing (see *Tip Sheet E*)

- evaluate design of clothing currently worn at school, including that used for physical education/sports activities and consider making changes to improve protection from UV (for example, extending sleeves, requiring collars on shirts, long shorts/skirts)
- actively encourage wearing of broad-brimmed hats

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F Sunscreen (see *Tip Sheet F*)

- educate the school community about the correct use of sunscreen and the level of protection it provides
- provide sunscreen at various points around the school

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G Risk management for staff (see *Tip Sheet G*)

- conduct a UV Risk Assessment for all staff

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**Monitoring and evaluation**

This policy/plan will be monitored by <name of position/committee> who will:

- Ensure that the policy is reviewed in <no more than two to three years after implementation>
- Contact the <State/Territory cancer organisation> annually to ensure that up-to-date information is maintained in relation to resources and policy information

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## Monitoring and evaluating your policy or plan

Below is a framework that could be used to monitor and evaluate your UV risk reduction policy or plan, including examples of objectives and strategies. We suggest that you regularly assess your objectives and strategies and make changes if necessary.

### Objectives

#### *Existing objectives*

OBJECTIVE	FULLY, PARTIALLY OR NOT ACHIEVED	COMMENTS
Work towards a safe school environment that provides shade for students and staff.	Partially achieved	Trees planted on perimeter of school oval to provide shade for spectators. Temporary shade to be hired for events until trees grow. More shade required for canteen area.

#### *New/revised objectives:*

- \_\_\_\_\_
- \_\_\_\_\_

### Implementation

#### *Existing strategies*

STRATEGY	FULLY, PARTIALLY OR NOT IMPLEMENTED	COMMENTS
Evaluate design of clothing currently worn to school and for physical education/ sports activities and consider changes.	Partially implemented	Students are now required to wear polo shirts with elbow-length sleeves during physical education/ sport lessons.

#### *New or revised strategies:*

- From Term 1 next year, a hat will be required for outdoor lessons.
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## Tip sheets

### A Shade

Shade is the key element of a school's UV risk reduction strategy. The school development plan should aim to increase the amount of shade available in the school. Consult with the facilities or grounds committee to develop long-term shade strategies for the school grounds. Consider temporary shade structures as a short-term measure.

It is recommended that existing shade is assessed before planning additional shade and that a list of priorities be developed. Shade should be established in high-risk areas first. Shade should also be considered in the planning of outdoor events, whether held on the school grounds or at external venues.

#### **Shade priority**

Shade is required for outdoor areas where members of your school community congregate, but some areas will have a higher priority than others. You should focus on:

- areas where outdoor activities are likely to occur or that students use during breaks between 11 am and 3 pm
- where outdoor activities occur and/or where people are likely to be watching outdoor activities for more than 10 minutes.

#### **Assessing your shade**

Using a site plan, mark where shade is available at peak UV times and mark areas where students congregate. Then compare the two. On the basis of this comparison, develop a list of priorities for change.

#### **Some strategies for increasing shade at your school could include:**

- Maximise existing shade—for example, verandahs, covered walkways and covered canteen areas—by facilitating and encouraging student use during breaks.
- Allow students to eat lunch indoors if shade in school grounds is inadequate.
- Plant trees, particularly near ovals and other activity areas.
- Plant trees in clusters to increase the shade area.
- Prune low-hanging branches from trees to allow access.
- Relocate garden beds that are in shaded areas.
- Build seating around trees.
- Move seats and tables to areas of shade.
- Erect portable shelters in exposed areas.
- Hire shade structures for large outdoor events.
- Conduct 'club' activities indoors during lunch and recess breaks.
- Ensure shaded areas are pleasant to sit in (for example, that they are grassed, clean of leaves and sticks or have seating, and that the gardener doesn't water areas just before breaks).



## B Organisation of outdoor lessons and breaks

UV radiation peaks during the two hours either side of solar noon (when the sun is directly overhead). About sixty per cent of the day's UV is received during this time. To reduce student and staff exposure to UV, review timetables to minimise time spent outdoors during peak UV periods.

### **Possible strategies include:**

- Consider shorter lunchtimes and longer morning breaks.
- Make indoor venues available during lunch and morning break times.
- Timetable outdoor classes early in the morning where possible.
- Schedule physical education/sports activities to maximise use of indoor facilities during high-risk periods.
- Consider rescheduling sports so that indoor sports are conducted during peak summer times (for example, badminton in summer and softball/baseball in winter).
- Conduct outdoor assemblies early in the day.
- Plan fire drills etc early in the morning.

## C All-day events

Severe sunburn is likely when students are outside for long periods of time. The risk of skin damage on sports days and all-day excursions is high. Planning for outdoor events should incorporate a range of sun protection strategies that operate throughout the day.

- Reschedule the event to avoid peak UV times if possible.
- Consider conducting twilight or indoor events, or early morning events over a couple of days.
- Consider conducting the event during the winter months.

You should also consider discussing how inter-school sporting arrangements can be improved with the relevant school sports associations.


### **Consider the following strategies**

Prior to the event:

- Visit the venue to work out how much shade will be required.
- Organise portable shade structures—some cancer organisations and local councils hire or lend tents.
- Consider sharing the purchase of portable shade structures with neighbouring schools.
- Work out the best way to structure the day to maximise shade, given that it will move.
- Plan to provide plenty of sunscreen.
- Inform students, parents and staff that sun protection will be a priority and outline strategies to be undertaken.
- Encourage spectators to bring umbrellas or tents to supplement planned shade.
- Recommend that broad-brimmed hats and long-sleeved clothing be worn by all spectators and participants when not competing.
- Promote a hat competition as part of the sports day.
- Promote house points or prizes for people covering up and encouraging others to do so.
- Remind participants to bring clothes so that they can cover up after they finish their events.
- Promote the sun protection message in all printed information about the day.

### **On the day**

- Provide enough shade for spectators.
- Ensure shade is available where food and drinks are provided.
- Provide shade for the competitors at the marshalling areas.
- Provide shade for all officials where possible.
- Ensure students have shade while waiting for transport.
- Plan for the movement of shade during the day.
- Arrange for protective clothing to be taken to participants at the finish of events.
- Consider making hat wearing mandatory on the day for staff and students, except when competing.
- Encourage students, staff and parents to wear clothing that covers most of their skin.
- Consider including creative events to reinforce the sun protection message—conduct a mad hatter's competition or a tug of war between teams wearing different styles of hats.
- Provide sunscreen at various locations.
- Assign students (for example, non-participants or members of the student representative body) to circulate with sunscreen.
- Give regular reminders about sun protection over the public address system.



## D Curriculum/school programs

It is important that environmental and behavioural elements of UV risk reduction policy are supported by education through curriculum programs. Students should not only understand how and why they need to protect their skin, but also have the opportunity to explore related issues, such as self image and peer pressure, all of which influence decision making in relation to UV exposure.

Activities relating to UV risk reduction can be incorporated into a number of different areas of the curriculum, and may have quite different objectives, depending on the ages and needs of your students and the stage your school has reached in the development or implementation of its policy or plan.

Your State/Territory cancer organisation has a range of resources for loan or purchase, including:

- teaching resource books containing a range of activities, for example, *Be SunSmart*
- videos
- posters and other promotional items such as postcards and stickers
- kits relating to specific topics, for example, *Timebomb*.

Visit your State/Territory cancer organisation website—these are a further source of information and ideas.

Websites are as follows:

[www.cancer.org.au](http://www.cancer.org.au) (The Cancer Council Australia)

[www.cancer.org.au/act/act/index.htm](http://www.cancer.org.au/act/act/index.htm) (The Cancer Council ACT)

[www.nswcc.org.au](http://www.nswcc.org.au) (The Cancer Council NSW)

[www.qldcancer.com.au](http://www.qldcancer.com.au) (Queensland Cancer Fund)

[www.cancersa.org.au](http://www.cancersa.org.au) (The Anti-Cancer Foundation of South Australia)

[www.cancer.org.au/tas](http://www.cancer.org.au/tas) (Tasmania Cancer Council)

[www.sunsmart.com.au](http://www.sunsmart.com.au) (The Anti-Cancer Council of Victoria)

[www.cancerwa.asn.au](http://www.cancerwa.asn.au) (The Cancer Council of Western Australia)

The final section of this booklet lists some activity ideas that teachers can adapt according to interests, time available, student background, curriculum area and year level.

## E Clothing

Ideally, sun protective clothing should cover as much skin as possible.

### Clothing

The amount of protection provided by clothing is influenced by fabric characteristics and garment design and fit. A closely-woven fabric provides the best protection. Dark colours block more UV and hence give more protection than light colours, however they may be hotter to wear.

The ultraviolet protection factor (UPF) rating is used to rate the level of protection provided by fabric. A material's UPF is based on how much UV is transmitted through the material. The higher the rating the greater the protection provided.

### Ultraviolet protection factor (UPF) rating scheme

PROTECTION CATEGORY	UPF RANGE	% UV BLOCKED
Excellent protection	40 to 50, 50+	97.5
Very good protection	25 to 39	95.9 to 97.4
Good protection	15 to 24	93.3 to 95.8


Loose clothing is cooler and if a fabric is stretched it may provide less protection. Collars help to protect the neck. Shirts with longer sleeves and longer shorts and skirts provide better protection for the limbs.

### Hats

A broad-brimmed hat offers the best protection for the head and neck. For adults, a brim of at least 8 cm is recommended. The Cancer Council Australia does not recommend baseball caps and visors as they do not offer adequate protection to the back of the neck and ears.

### Possible strategies in relation to clothing include:

- Modify the school uniform design or dress code to increase the amount of sun protection it provides.
- Consider allowing the winter uniform (or at least long pants) to be worn during summer.
- Choose school uniform material with the highest possible UPF rating.
- Encourage students attending swimming classes to wear T-shirts or lycra protective shirts over bathers and have a dry shirt to wear when out of the water.
- Require sun protective clothing, including hats, for all camps and excursions.
- Require sun protective clothing, including hats, for physical education and sport.
- Involve students in the design of an appropriate school hat.
- Accept the wearing of 'brand named' (for example, surf style) broad-brimmed hats.
- Allow students to wear their own sun protective hats, for example, 'Akubra'.
- Consider offering a choice of hat colours and styles.
- Subsidise the cost of hats.

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- Offer spot prizes for hat wearers.
  - Explore ways of giving hat wearing a positive image.
  - Recruit influential students to act as role models—offer incentives if necessary.
  - Ensure staff act as role models by wearing appropriate hats and clothing.

### **Sunglasses**

Like skin, eyes can be damaged by UV. When worn with a broad-brimmed hat, sunglasses can reduce the amount of UV reaching the eyes by up to 98 per cent (compared with a reduction of about 50 per cent for sunglasses alone).

If students are encouraged to wear sunglasses, please note the following:

- To provide protection from UV, sunglasses should conform with Australian Standard AS1067 (1990).
- The standard relates only to the amount of UV passing through the lens. Therefore, sunglasses should be a close-fitting, wrap-around style, to reduce the amount of UV reaching the eyes around the edges of the lens.

## F Sunscreen

A sunscreen works by reducing the amount of UV reaching exposed skin. This means that sunscreen does not totally block UV from reaching the skin. No sunscreen gives complete protection, so it must be used in combination with other sun protection strategies. Sunscreen should never be used to deliberately increase the time spent in the sun.

The sun does not need to feel hot to damage skin and eyes. The damage is caused by UV, which is not seen or felt.

### **Applying sunscreen correctly**

Sunscreen must be applied correctly to be effective.

- Where possible, allow students to apply sunscreen at least 20 minutes before going outside.
- Apply to clean, dry skin. Leave a film of sunscreen on the skin—it should not be rubbed in.
- Apply evenly and generously—about a teaspoonful for the face, neck and ears and for each arm and leg.
- Reapply every two hours—more often if the skin is wiped, washed or sweaty.
- *Always* use sunscreen in combination with other sun protection strategies.

### **Labelling**

Sun protection factor (SPF) is a measure of the level of protection a sunscreen provides against sunburn. The higher the SPF, the more protection a sunscreen provides. The maximum SPF for sunscreens sold in Australia is 30+. A sunscreen product can only be labelled with an SPF number when it complies with the Australian/New Zealand standard. The Cancer Council Australia recommends the use of SPF 30+ sunscreen.

Broad spectrum means the sunscreen provides protection against the two types of UV that reach the earth's surface (UVA and UVB).

### **Strategies to increase sunscreen use**

- Provide pump packs at various publicised points around the school with posters outlining correct application and emphasising the need for other sun protection methods
- Place sunscreen on the booklist.
- Encourage parents to provide each student with their own sunscreen.
- Provide sunscreen for all outdoor lessons.
- Investigate whether parents' groups can fund the provision of sunscreen.
- Recommend that students wear sunscreen to school and remind parents through newsletters.
- Investigate selling sunscreen as a school fundraiser.

Most State and Territory cancer organisations can provide schools with sunscreens at discounted prices.

Note: If you supply sunscreen, it is recommended that you inform parents of the brand and type, so that if it does not suit their child's skin an alternative can be provided by the parents.



## G Risk management for staff

Workplace UV exposure is a hazard for any education employee required to spend all or part of their day outdoors (see 'Legal issues in relation to UV exposure'). All staff are at risk during yard duty and outdoor events. Physical education, sport and outdoor education teachers, and ground staff are at particular risk. Identify duties that involve exposure to UV, for example, outdoor classes, yard duty, sporting carnivals, and the times of day, the duration and frequency of these tasks.

### **Some possible strategies to reduce staff risk include:**


- Conduct an education program for staff at a staff meeting or professional development session. Speaker's kits may be available from your State/Territory cancer organisation.
- Repeat the education program at appropriate intervals.
- Review the education program at appropriate intervals.
- Ensure that new staff are informed about UV risk reduction strategies.
- Include information in staff handbooks.
- Strongly encourage staff to keep a broad-brimmed hat, sunglasses and a long-sleeved shirt at school for use during outdoor duties.
- Provide all staff with a broad-brimmed hat.
- Encourage those staff who do not wish to wear a hat to carry an umbrella instead.
- Make umbrellas available in the staff room.
- Subsidise the purchase of broad-brimmed hats of their own choice for all staff.
- Encourage staff to wear clothing that protects as much of their bodies as possible, for example, tops/shirts/dresses that cover the shoulders and longer skirts/shorts, particularly for outdoor events.
- Emphasise the importance of staff acting as role models for students in reducing UV risk.
- Educate staff about the correct use of sunscreen, including the meaning of SPF factors, correct application and the need for reapplication, and its use in conjunction with other UV risk reduction strategies.

## Curriculum activity ideas

The activities listed below are starting points—ideas that can be developed further and adapted according to objectives, time available, student interests and abilities—rather than comprehensive lesson plans. They are arranged under headings according to specific objectives (some may achieve more than one objective, depending on how they are developed by the teacher). Your State/Territory cancer organisation has teaching resources providing more structured activities.

### **To raise student awareness about UV risk at school and elsewhere:**

- Conduct an individual UV risk assessment—each student records their own activities over a typical week; assesses when and where they are at risk; the kinds of activities they are involved in at the time; current risk reduction strategies (if any); and possible risk-reduction strategies, either that they could implement personally or that could be implemented by the school, or both. Note that risk levels would change according to time of year/day. Begin by brainstorming a list of factors that might contribute to UV risk level, for example, presence of shade and reflective surfaces, time of day, clothing worn during activity, etc, and discuss how these factors are likely to affect risk. This activity could be repeated for weekend activities, for example, students monitor their UV risk over a typical weekend or weekend day.
- On the basis of the risk assessment, discuss issues relating to UV risk reduction in different situations, for example, whose responsibility is it to implement the various strategies (especially where there are different options, for example, shade is available that students could choose to use but they elect to sit in the sun)? Which factors influence their decisions to protect/not protect themselves from the sun? Do these factors vary according to different circumstances? What information/factors would influence them to behave differently if they are currently not protecting themselves adequately?
- Develop a UV risk reduction policy or plan—a series of headings could be developed as a class on the basis of the risk assessment, that is, according to the activities or sites where UV risk was greatest (alternatively use those on the UV risk reduction framework). One heading could be allocated to each group who then develop a series of strategies that could be implemented over specified time periods, for example, by the end of the year, within two years or within five years. As a class, pool the information and put together one policy or plan, which could be submitted to the relevant school body or committee. Emphasise that the strategies need to be realistic, and also that they need to aim for improvements over time.
- Develop a sun protection plan for an event such as a sporting carnival, fete, excursion or camp. This may include making suggestions about timing of activities, appropriate dress, temporary shade and strategies to encourage spectators to be protected from the sun.

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- Develop a UV risk reduction policy or plan for a favourite recreational activity. This could be an activity that students participate in, for example, if they are members of clubs involved in outdoor activities, or for activities in which they would like to participate. The plan might also be for a specific event that students might be involved in outside school, for example, an outdoor concert. Again, the proposed strategies should be realistic and practical, but also encourage students to be as creative as possible.
  - Develop a quiz for other members of the school community, for example, parents and younger students, to assess their knowledge about an aspect(s) of UV risk reduction. It should include correct answers and an appropriate scoring system.
  - Design a game to teach younger students about being SunSmart. The activities should be appropriate to the age of students for whom the game is designed, but encourage students to make it as interesting and challenging as possible. A fun day could be organised with a local primary school where students use their games and conduct other activities to promote the SunSmart message.

**To raise the awareness of the wider school community about UV risk reduction:**

- Develop an education campaign about one or more relevant issues. This might be a general education campaign, or focus on a specific aspect of UV risk or skin protection, for example:
  - The nature of UV, for example, peak times, the fact that it can't be seen or felt, it is not related to temperature, effect of UV on the skin etc and the implications of this for risk reduction strategies.
  - Appropriate use of sunscreen. This should include correct application and reapplication, meaning of terms such as SPF, broad spectrum and water-resistant and the appropriate role of sunscreen in reducing risk of overexposure to UV.
  - Skin cancer and other damage resulting from exposure to UV, for example, why and how UV causes this damage, statistics, types of skin cancer and other damage.
  - The importance of early detection—how to check the skin and what to look for, what to do if concerned about a spot, etc.

Education campaigns may incorporate one or more of posters, releases for the school newsletter, a presentation for other students or staff etc. The campaign may be developed as part of one or more of health, art, graphics, media studies or even science.

Campaigns could be general or focus on a specific group within the school community, for example, students with a language other than English may choose to develop a campaign that focuses on members of the school community who speak that language. Language classes could develop an education campaign in the language they are studying.

**To assess and improve the availability of attractive shaded areas within the school grounds:**

- Conduct observational studies of the areas in which students congregate at peak UV periods, particularly lunchtime. Students would need to draw a map of the school grounds, and consider questions such as how many students use shade, which shaded areas are most/least used, what students who are out in the sun are doing etc. These studies would need to be repeated at different times during the lunch break and on different days.
- Survey the student population in relation to current shade availability and possible improvements, for example, Do they use current shaded areas? Why/not? Where do they believe new shaded areas should be created? What kinds of areas should they be?
- Develop proposals for shaded areas according to usage patterns identified by the observational study. Students may be also able to design shade appropriate for the area.

**To consider how clothing and sunscreen can be best used as a UV risk reduction strategy:**


- Review the sun protective quality of the current school uniform, considering aspects such as style, for example, length of sleeves, skirts and shorts; presence of collars on T-shirts; colour; fabric weave; and types of hat available or recommended (if at all). Recommendations for changes could be developed. If the school does not have a uniform, ask students to develop a dress code, for example, for sports clothing.
- Develop designs for a range of sun protective or SunSmart clothing for a particular purpose, for example a school or sports uniform, or a favourite weekend activity.
- Conduct a fashion parade of SunSmart outfits using items already in students' wardrobes. Students could choose the type of activity for which their outfit was suitable and prepare a commentary which explains the design features of each that contribute to UV risk reduction.
- Invite students to develop a clothing requirements list for a specific school activity, for example a school camp which incorporates a range of outdoor activities or a clothing policy for school camps. This could incorporate recommendations for staff as well as students.
- Conduct a sunscreen survey to assess:
  - how many students have access to sunscreen
  - whether they are using it
  - whether they know where to find it within the school
  - whether they know how to apply it correctly.

**To encourage responsible decision making by students about personal strategies to reduce their risk of excessive UV risk:**

- Students role play, in pairs, one of the following roles (then swap and play the other).  
*Person A:* Invite your friend to the beach, river or pool to see who is there and work on his/her tan. Your friend is new to the area and you try to convince him/her that a tan is essential to be part of the group.  
*Person B:* You are new to the area and want to meet more people your age. You have skin that burns easily and have doubts about accepting your friend's invitation.

As a class, discuss how students felt in each of the two roles. Questions for discussion might include:

- Were you able to resist your friend's invitation, and if so, how did you feel?
- What tactics did your friend use to attempt to persuade you, and how did those tactics make you feel?

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- What are the reasons for and against accepting the invitation? Which reasons are most important? Why? Would those reasons always be the most important?
  - How did you feel while you were trying to persuade your friend to accept the invitation? What could you do to help your friend meet people without placing them in this position?
  - What strategies could be used by Person B to make friends without compromising his/her health?
  - Create and conduct role plays like the one above, but using different scenarios related to UV risk reduction, for example, in relation to hat wearing and sunscreen use and avoiding being in the sun during the peak UV periods.
  - Ask students to brainstorm as many behaviours as they can that reduce the risk of skin damage due to sun exposure.
    - Allocate each behaviour to small groups (about two to three students), and ask each group to discuss and list factors that make the behaviour easier and more difficult.
    - Ask the groups to develop at least one strategy to address each of the factors that make that behaviour more difficult.
    - As a class, discuss these strategies—which are most likely to be effective? Which strategies would students use? What are the main reasons that they would continue to behave in a way that increased their risk of sunburn despite knowing the risk?
  - Develop a series of Dear Doctor (or similar) letters describing scenarios relating to sun protection, and ask students to develop responses. Scenarios could include my boyfriend/girlfriend thinks I look better with a tan; I know I should wear a hat but my friends give me a hard time when I do; Our tennis matches are always scheduled for the middle of the day and I burn easily; Our local swimming pool has no shade. Alternatively, students can develop their own scenarios and swap them with a partner—then respond to the scenario developed by their partner.

**To encourage students to be pro-active in identifying sources of UV risk and in developing strategies, both personal and more broadly, to reduce risk:**

- Students choose a local facility at which outdoor activities are conducted, and:
  - make an assessment of when and under what circumstances users of that facility are at risk of excessive UV exposure
  - develop some strategies to reduce UV risk for users that could be implemented by the management of the facility
  - develop some recommendations for strategies that could be employed by users of the facility.

This might involve finding out who uses the facility and when, and visits to the facility at different times to assess shade availability. It could be done in small groups, with different groups allocated a different user group to consider.