

Sun Safety Information Guide For Schools



Dear School Staff:

This *Information Guide* contains facts and tips to assist you to bring the "sun safety" initiative alive in your school. Children and adolescents, both during play and sports activities at school are often exposed to too much ultraviolet radiation (UV) in sunlight. Although it is important that students be active and get fresh air, the health concern of overexposure to UV light rays needs to be addressed.

The health risks associated with over-exposure to UV rays are largely preventable. With some simple steps, eyes and skin can be protected. You can play an important part in this process. Use this guide to:

- Educate students about these health concerns.
- Raise awareness about standard sun safety recommendations.
- Make sun safety an integral part of your regular outdoor school programming. Advertising for special outdoor events or outings should include sun safety information.
- Ideas for promoting Sun Safety Awareness. i.e. morning announcements, hall or class room displays.

Preventing sunburns and protecting eyes from the UV rays are important goals to set with your students. It will give them the best gift of all -- health for tomorrow.



BACKGROUND INFORMATION

In Canada we receive enough ultraviolet radiation (UV) in sunlight to damage our skin and eyes even when the ozone layer is intact. However, with the gradual thinning of this layer since 1980, Canadian adults and children are being exposed to a more intense penetration of UV rays.

[Environment Canada](#) predicts this increase to continue at least to the year 2050 (Environment Canada 1996).

Infants and children are at high risk for over-exposure to sunlight.

- Infants and children have thinner skin than adults and are therefore more sensitive to UV rays ([Health Canada](#), June 2004).
- All skin tones are at risk for skin damage from UV rays. Those at greatest risk for skin damage are fair-skinned individuals, especially those who freckle or who burn easily, never tan or tan poorly.

Health risks associated with excessive sunlight UV exposure include sunburns, skin aging, eye damage and skin cancers.

- One blistering sunburn during childhood can **double** the chance for a child to develop skin cancer later in life. This is because the damage to the skin cells does not go away. Instead, the damage accumulates with each sunburn over the years.
- The incidence of skin cancer is steadily increasing in Canada. This year, there will be 30% more new cases of skin cancer expected in Canada compared to just ten years ago.
 - 1994 – 58,500 cases
 - 2004 - 76,000 new cases of common skin cancers are expected this year ([Canadian Dermatology Association](#), May 2004).
 - Skin cancer alone accounts for about 1/3 of all cancers diagnosed in Ontario. About 1 in every 7 Canadians will get some form of cancer during their lifetimes ([Cancer Care Ontario](#), May 2002).

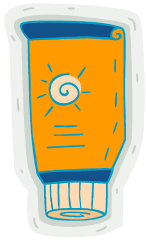
REMEMBER: The health risks associated with excessive sunlight (UV exposure) are largely **preventable!**

Preventative health habits developed at a young age are likely to continue into adulthood.



- Sun protection strategies are relatively easy to adopt and incorporate into a daily routine, to the extent that they become habits. If these behaviours are regularly reinforced and role modelled, they are more likely to continue into adulthood, particularly as children's capacity to understand the reasons for such habits increases.

([World Health Organization](#) Information Series on School Health Document Seven Item 2.4).



- Knowing how to prevent a recurrence of sunburn can provide children with a sense of control over their own health and well-being. Most children are capable of putting on hats as they go outside and, with guidance and practice, can learn to correctly apply sunscreen. These simple strategies can quickly become part of the daily routine. Another helpful factor is that, unlike other preventative measures, where the effects may not become evident for several years, the symptoms of sunburn are more immediate, thus enabling children to relate the behaviour (lack of sun protection) to the outcome (sunburn).

([WHO](#) Information Series on School Health Document Seven Item 2.4).

School children are especially susceptible to fashion trends suggesting that a suntan is healthy.

- The influence of peer pressure and fashion becomes more powerful during adolescence, and good habits tend to be replaced by sun seeking behaviours. This is often based on the belief that a tan is healthy and attractive. Sun protective clothing (with the possible exception of sunglasses) is seldom considered fashionable by young people.
- Even when adolescents are aware of the long term implications, they tend to be reluctant to protect themselves, just as they are more likely to indulge in other forms of risk taking behaviour, such as tobacco use or unprotected sex. It is important to address these issues through programmes that develop life skills, promote healthy decision making and give young people the self-esteem to address these pressures.

([WHO](#) Information Series on School Health Document Seven Item 2.5)

Did You Know that...

Up to 80% of ultraviolet radiation passes through puffy, fair-weather clouds, haze and fog. The sun safety recommendations apply on cloudy and hazy days too.

Furthermore, a child can receive an additional 10-80% more UV if that child is on or near a surface such as sand, cement, water or snow that reflects the sun's rays.

STANDARD SUN SAFETY RECOMMENDATIONS

The following standard sun safety recommendations are endorsed by [Health Canada](#), the [Canadian Cancer Society](#), the [Canadian Dermatology Association](#) and [Environment Canada](#)

It is important that staff provide a positive “sun-safe” role model. Staff and participants should follow these recommendations when outside:

Limit time in the sun between 10 a.m. – 4 p.m.



- Whenever possible, plan daily outdoor activity so that children are not playing in direct sunlight between 10 a.m. to 4 p.m. This is the time of day when UV radiation is the highest. In the summer time, daily UV reports and warnings are given with the weather forecast.

Look for or create shaded areas in which to do outdoor activities.



- Do outdoor activities in shady spots, e.g. Under a tree or in the shade of a building.
- Create shade by planting trees or using partial roofs, awnings, umbrellas, gazebos, tents, etc...

Wear clothing to protect as much skin as possible.



- Long-sleeved shirts and long pants (or at least knee-length shorts) are recommended even on overcast days.
- Tightly woven fabrics block the sun’s rays the best. Cotton-polyester blends are a good choice. (A fabric that blocks out the light when held up to the sun or a light bulb will act as a shield against ultraviolet light). Sunscreen should be applied under sheer clothing.
- Wearing a T-shirt while swimming will improve your sun protection. Wet fabrics block about three-quarters as much UV radiation as the same fabrics would when dry. Choose a tightly woven fabric, since they filter UV rays more effectively than loosely woven ones (wet or dry). For added protection, pick a dark coloured shirt, preferably made of a fabric that contains some polyester.

Wear a hat with a wide brim or with a flap to cover the back of the neck.



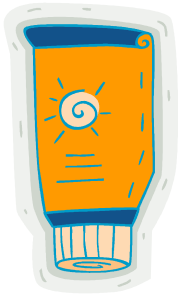
- A hat with a wide brim or with a back flap will help shade eyes, ears and neck areas from direct UV rays. Hats made of tightly woven fabric are best. This protection is important because ***two out of three skin cancers occur in the head and neck area.***

Put on UV protective sunglasses.



- Adults and children should wear sunglasses that screen both UVA and UVB rays. It is preferable to choose sunglasses that list on the label the exact amount of UVA and UVB rays blocked. The higher the percentage of ultraviolet radiation blocked the better. 100% protection is the best.
- Wide brim hats are effective in blocking direct ultraviolet radiation from eyes and are a good choice for young children. Sunglasses, if worn by children, should be unbreakable and 100% UV protective.

Use a sunscreen with SPF 15 or higher that gives protection from both UVA & UVB rays.



- SPF (Sun Protection Factor) is the ratio between the amount of UV exposure required to cause skin redness with and without a sunscreen. Thus, if you apply a sunscreen with an SPF of 15, your skin will take 15 times longer to redden in the sun than it does without protection.

EXAMPLE:

Burn time without sunscreen 10 minutes

Apply SPF of 15. Wait 15 to 30 minutes before sun exposure

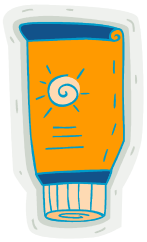
Burn time with sunscreen $15 \times 10 = 150$ minutes

- All staff and children should apply sunscreen 15 to 30 minutes before going outdoors to do any activities.
- Also apply an SPF 15 sunscreen lip balm to the lips.
- Sunscreens absorb UV rays and prevent most rays from penetrating into the skin. Water resistant or waterproof sunscreens stay on the skin longer and are a good choice when active and perspiring or when in water.
- Remember that, while UVB rays are most damaging from 10 a.m. to 4 p.m., UVA rays are also of concern and are present throughout all the daylight hours.
- Sunscreen with an SPF 15 is the *minimum* protection recommended. If you are going to be outside in the sun for longer than two and a half hours an SPF of 20-30 might be a better choice. No sunscreen offers complete protection but the higher the SPF, the more protection given.
- Sunscreen sprays can be useful on hairy areas of the body and will not leave an oily residue on the skin. They need to be applied carefully however, and never near an open flame.

- If repeated sun burn of lips, nose or ears is a problem, look for a total sun block product such as zinc oxide. Ask a pharmacist if further information is needed.
- If any child develops an allergic skin reaction such as redness, itching, blotchiness or a rash after sunscreen has been applied, stop using the product immediately. Inform the child's parent of the reaction and suggest that he/she consult with a pharmacist or doctor regarding alternate sunscreen choices.

How to Use Sunscreen

Research has shown that many people use sunscreen incorrectly. For maximum protection, follow these guidelines.



- **Read and follow the manufacturer's recommendations on the bottle or tube.** Check for the expiry date of the product. Do not use after expiration date.
- **Apply sunscreen 15 - 30 minutes before going out.** This is *important*. Apply and leave undisturbed for 15 – 30 minutes. It allows time for the active ingredients in the sunscreen to reach the protection level.
- **Apply sunscreen generously to dry clean skin.** Sunscreen must be applied to dry skin generously to be effective. Failure to apply an adequate amount and to thoroughly cover all exposed skin can significantly reduce the protection the sunscreen product will give. Don't forget ears, nose, back of neck, backs of legs and tops of feet. Sunscreen should be applied generously to **all** sun exposed skin.
- **Reapply every 2-3 hours and after perspiring.** Sunscreen (including waterproof varieties) should be re-applied every 2-3 hours and after skin becomes wet to maintain maximum effectiveness. Swimmers should use waterproof sunscreens, formulated to stay on in water for up to 80 minutes.

Note: Repeated applications of a sunscreen simply re-enforces the sun protection. It does not increase the amount of time you can spend in the sun beyond the maximum SPF of the sunscreen.
- **Wiping perspiration will wipe off sunscreen, "blot" rather than wipe.**
- **Use a sunscreen even on cloudy, hazy or foggy days.**
- **Test for allergic reaction when first using a sunscreen.** Always test a small, sun-exposed patch of skin on the forearm for

possible allergies to the sunscreen brand. Apply a liberal amount of the sunscreen on the inner forearm for 2-3 days consecutively. Check to see if there are any signs of an adverse reaction (rash, hives redness, and itchiness).

- **If applying more than once substance.**
Apply the sunscreen first, wait about 15 minutes to allow time for the ingredients to soak into the skin, and then put on the second substance.

Remember, no sunscreen protects 100%. So apply sunscreen and then cover-up with a wide brimmed hat, long-sleeve shirt and pants or knee-length shorts.

If you would like more information about sun safety strategies contact:

[Chatham-Kent Public Health Unit](#)

435 Grand Ave. W.
Chatham, ON
(519) 352-7270

[County of Lambton Community Health Services Department](#)

160 Exmouth St.
Point Edward, ON
(519) 383-8331
1-800-667-1839



[Windsor-Essex County Health Unit](#)

1005 Ouellette Ave.
Windsor, ON
(519) 258-2146
1-800-265-5822



Information adapted from:
Canadian Dermatology Association
Environment Canada
Toronto Public Health Department
WHO Information Series on School Health

SUN SAFETY AWARENESS IDEAS FOR YOUR SCHOOL

Ideas to get the sun safety awareness message into your school.

- Have a school-wide brimmed hat and sunglasses day. Make it a fun day with an important message about the dangers of too much sun. Have wacky hat and shades events, award prizes to the wackiest hat, the hat that gives most shade, best group with matching hats, most hats in the class, hat with the most class etc. Let your imaginations go wild.
- Create your own sun safety slogans. Use the imaginative ideas of the students to create a sun safety poster or message for the school halls, for daily announcements, as activity reminders in newsletters and any messages sent home to parents.
- Sun Safety Awareness Week is a great time to start your school thinking about sun safety. To find this years theme look at the Canadian Dermatology website; www.dermatology.ca.
- Include sun safety information in the school newsletter or use the sample newsletter articles included. Add the sample sun safety symbols as graphics in your newsletter (included). Two handouts Sunlight & Your Skin and The UV Index – Your Guide to Action have been included that may be sent home to the parents.
- Remember to make trips, play days, bike rodeos and other special events sun safe. Advertise all play days and special events as sun safe events (see sample template). Have roaming Sun Safety Marshals, to identify the sun safe participants. Have hat and sunscreen reminders in the announcements during the event to remind the students and staff to cover up and reapply sunscreen.
- Remind school staff to practice sun safety role modeling. Show the students that you respect the power of the sun and encourage them to follow your example.
- Put sun safety messages around your school. Post sun safety posters at the doors to remind students and staff to cover up on their way out.
- Have “**sun screen breaks**” in the schedule for children to apply sunscreen 30 minutes before going outdoors. Discuss in the classroom where students can store their hats and sunscreen.

SAMPLE NEWSLETTER ARTICLES

Sample newsletter articles for use in your school newsletter. You may use one or all of them. Included are some “sun safe” graphics to add in your newsletter.

Article # 1

Spring is finally here.

Sun safety tips

With spring on its way we just can't wait to spend more time outdoors. It feels great to be outside playing with the kids, gardening or just relaxing. Unfortunately, the sun's rays are not always good for us. Too much sun exposure can result in skin cancer, cataracts and premature aging of the skin.

The good news is that there are ways that you can protect yourself and reduce the risk. Here are a few tips to help you and your family enjoy the sun safely:

- **Limit time in the sun between 10 am and 4 pm**
Try to schedule activities when the sun is not at its strongest.
- **Look for shaded areas or create shade with umbrellas or awnings**
Have your picnic under the shade of a tree or under an umbrella. If you don't have much shade in your backyard think about planting a tree.
- **Wear clothing to protect as much skin as possible** (Long-sleeved shirts and long pants are recommended) Try to keep the kids covered up on school trips or sporting events.
- **Wear a hat with a wide brim or a back flap**
Everyone can put a hat on. Kids are more likely to wear them if mom and dad do.
- **Put on UV protective sunglasses**
- **Use a sunscreen with SPF 15 or higher that protects from both UVA & UVB rays**
Remember to apply your sunscreen 15 to 30 minutes before you go outside and re-apply every 2 hours.



**Be Sun Safe
Check the Time**



**Be Sun Safe
Look for Shade**

Article #2

What Myths Are Your Children Learning About the Sun?

MYTH #1 *Are your children learning that a suntan is a sign of health?*

Fact: A suntan is a sign that your skin is trying to protect itself against the sun's damaging rays. The tan will fade but damage to your skin cells remains and adds up over the years.

MYTH #2 *Are your children learning that you can't get a sunburn on a cloudy day?*

Fact: Up to 80% of the sun's rays can pass through light clouds, mist and fog. You can get a sunburn even on cloudy days. Sunburns increase your risk for skin cancer.

MYTH #3 *Are your children learning that only fair skinned people are at risk from too much exposure to sunlight?*

Fact: Too much sunlight can damage eyes leading to cataracts. Too much sunlight can also damage the skin leading to sunburn, premature skin aging and skin cancer. Everyone, regardless of skin tone, needs protection from the sun.

BE SUN SMART this year.

Protect your family against damage from the sun.

Teach your children to be sun safe by:

Limiting time spent in the sun, wearing a wide brimmed hat, long sleeved shirt, long pants (or at least knee-length shorts) and sunscreen.



**Be Sun Safe
Cover Up**



**Be Sun Safe
Wear A
Wide Brimmed Hat**



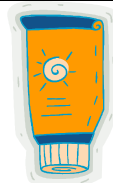
**Be Sun Safe
Check the Time**



**Be Sun Safe
Look for Shade**



**Be Sun Safe
Wear Sun Glasses**



**Be Sun Safe
Use Sunscreen**

Article # 3

Sun and Sports

Spring is when the outdoor baseball and soccer leagues often begin. It is also a great time to remind your budding Olympians to play sun safe.

Teach your athletes to be sun safe by:

Limiting the time spent in the sun.

Try to schedule activities when the sun is not at its strongest. When possible arrange your practices in the early morning or late afternoon.

Look for shaded areas or create shaded areas when the kids are at a practice or a game.

It is not always possible to avoid the sun but you can still protect yourself and your children by finding shade. The kids can rest in between quarters, innings or games in the shade.

Dressing for the Sun.

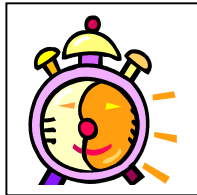
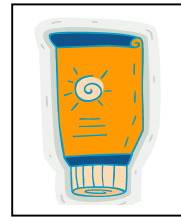
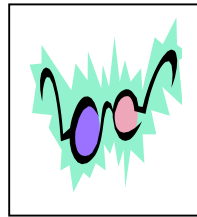
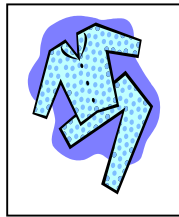
Wear a hat with a wide brim or a flap that covers the back of the neck. This shades your face and neck. Wear loose clothing to protect as much of your skin as possible (long sleeved shirt and pants).

Wearing Sunglasses.

Protect your eyes. Choose sunglasses with UVA and UVB protection.

Using Sunscreen.

Use a broad-spectrum sunscreen with an SPF of 15 or higher. Remind your children to apply sunscreen 15 to 30 minutes before going out in the sun and reapply every 2 to 3 hours. If you're going to be outside for longer than 2 ½ hours, an SPF of 20-30 might be a better choice. Remember to check the expiry date on the bottle and if you are not sure, get a new one.



**REMEMBER TO COME SUN SAFE...
WIDE BRIMMED HAT, SUN-SAFE CLOTHING,
SUN GLASSES AND SUNSCREEN**



SUN SAFETY RESOURCES

Canadian Cancer Society:

Living with Sunshine – A Primary Teaching Resource on Sun Protection for Grades 1, 2 and 3 available in English and French (2003)

Be Sun Smart Activity Book – Grades 5 – 6 (2003)

Fortune Teller – a fun resource for primary school age children (2003)

SunSense – poster and companion bookmarks

Canadian Dermatology Association:

Sun Safe Play, Everyday – Video recommended for children ages 2-6. Includes helpful tips for parents for sun safe play. Stickers, bookmarks and posters may be ordered. The colourful poster features a checklist for children prior to going outdoors; complements the video.

Ontario Sun Safety Working Group:

UV Radiation: Science, Sun Protection and the Classroom Grades 1-8 (1998)

Environment Canada:

Children's UV Index/Sun Savvy Program Bilingual for children under 14 (2003)

Websites:

World Health Organization (WHO) www.who.int/peh/uv

Sun Protection and Schools – How to Make a Difference

Sun Protection- A Primary Teaching Resource

Evaluating School Programmes – To Promote Sun Protection

WHO Information Series on School Health – Document Seven – Sun Protection: An Essential Element of Health Promoting Schools

Environment Canada – www.msc-smc.ec.gc.ca/education/uvindex/index_e.html

Children's UV Index Sun Awareness Program

Sun Savvy School Clubs

Health Canada - www.hc-sc.gc.ca

Smart Summer Fun

Canadian Cancer Society – www.cancer.ca

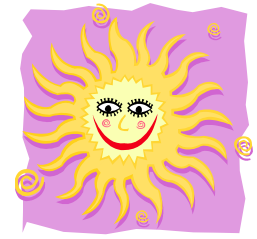
Living with Sunshine A Primary Teaching Resource on Sun Protection for Grades 1, 2 and 3 may be downloaded

Canadian Dermatology Association – www.dermatology.ca

Various resources in French and English

Safe Kids Canada - www.safekidscanada.ca Click on “Teacher’s Resource Centre” - various resources – English and French

Sun Safety Guidelines Checklist For Schools and Daycares



Use this checklist as a starting point for development of your guidelines.

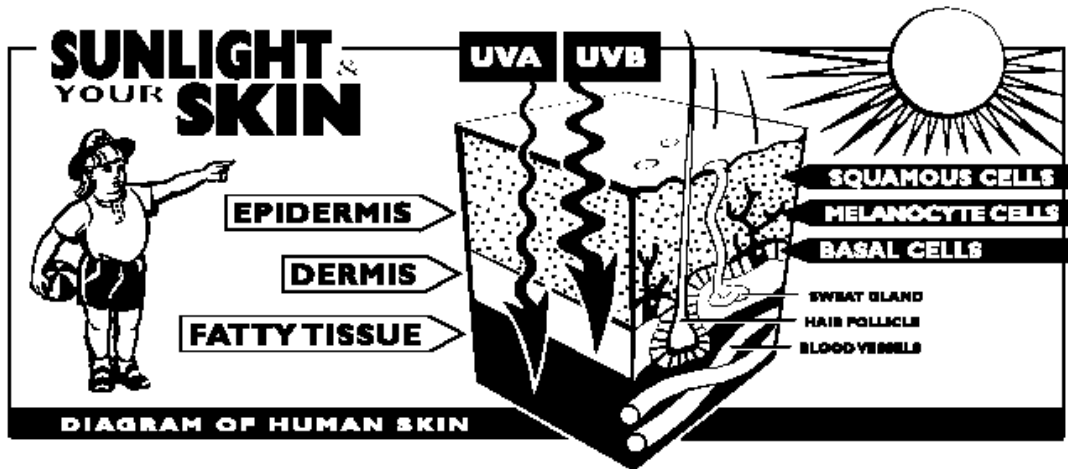
Please note that in Canada it is recommended that sun protection strategies have particular emphasis from April to September. The checklist should be completed in respect to these times.

Sun Protection Strategy	Currently in place	Planned within two years	No current commitment to this strategy	Comments
Policy We have a written sun protection policy that has been ratified by the school board.				
Our policy is reviewed at least biannually.				
All sectors of the school community (staff, students and parents) have participated in the development and/or review of the policy.				
Sun Protection Education Skin cancer awareness education is incorporated in the school curriculum.				
Sun protection is actively promoted prior to and during outdoor events eg. Sports, carnivals, camps, excursions.				
Staff have access to up-to-date resources on skin cancer and its prevention.				
Sun protection is regularly promoted in 2 or more of the following; the school newsletter, assemblies, daily bulletin, parent and staff meetings.				
Uniform/Clothing Students must wear a hat whenever they are outdoors.				
Students must wear a hat whenever practical during organized outdoor activities.				
Students must wear a hat that protects their face, neck and ears (broad brimmed or legionnaire style) whenever practical during organized outdoor activities.				
Students are encouraged to wear a hat whenever they are outdoors.				
Sport uniforms items are sun protective for example, shirts with collars, elbow length sleeves, longer style shorts/skirts.				
Students are encouraged to wear UV protective sunglasses where practical when involved in outdoor activities.				

Sun Protection Strategy	Currently in place	Planned within two years	No current commitment to this strategy	Comments
Suitable hats, clothing and sunscreen are required for all camps/excursions and are listed on the parent's permission form.				
There are procedures in place for students who are not adequately protected from the sun. Specify:				
Sunscreen Use. Use of SPF 15 or higher is actively promoted for staff and students.				
SPF 15 or higher sunscreen is easily accessible for staff and students.				
Provision is made for reapplication of sunscreen when necessary, for example at the beginning of the lunch break, prior to outdoor lessons or activities.				
Shade We have assessed whether the amount of shade available in the school grounds is adequate; for example at least enough for all students during passive activity, such as eating lunch.				
We are committed to increasing the amount of shade available when resources permit.				
We have adequate existing shade.				
Outdoor Activities Whenever possible, outdoor classes are scheduled early in the day; prior to 11:00 a.m.				
Sufficient indoor facilities are available for use by all PE/sport classes during high UV risk periods.				
If indoor facilities are not available, PE/sport classes are scheduled early in the day.				
Sun protection strategies are incorporated into major outdoor events, for example promotion of hat wearing, shade and sunscreen provisions, timing to avoid peak UV periods.				
Staff Staff are required to wear broad-brimmed hats, other sun protective clothing and sunscreen whenever they are outdoors i.e. yard duty, PE/sport classes, special events.				
Staff are encouraged to wear broad brimmed hats, other protective clothing and sunscreen whenever they are outdoors.				

Adapted from www.sunsmart.com.au

HAND OUT #1



Did you know that...

- When you feel the warmth of the sun on your skin, the UVA and UVB rays in sunlight are passing through the surface into your skin cells below (see diagram). On a windy or overcast day, even if you don't feel the warmth, this is still happening.
- As the UV radiation penetrates into the cells below the skin surface, your skin tries to protect itself by producing a brown pigment called melanin. The melanin, which appears as a tan, tries to act as a protective shield for your skin. However, this "built-in" protective shield is only partially effective in blocking the damaging effects of UVA and UVB radiation.
- Any reddening of skin is a sign that your skin has had too much sun exposure. A skin redness that still persists 24 hours after exposure means that skin damage may have occurred. This is even more of a concern if it is accompanied by soreness, peeling and/or blistering of your skin.
- When sunburn happens, the damage to your skin cells does not go away but accumulates with each sunburn over the years. Your skin becomes weakened by repeated burning and cells whose chromosomes have been damaged. This weakened skin has an increased chance of developing skin cancers.
- Avoiding sunburns to your skin and reducing overall UV exposure can prevent this skin damage.
- The sun's rays can also damage cells in the structures of your eyes. This may increase the risk for cataracts later in life. Protecting your eyes with sunglasses and/or a hat with a wide brim can prevent this damage.
- All skin tones are at risk for over-exposure to sunlight. Those at greatest risk for skin damage are fair-skinned people, especially those who freckle or who burn easily, never tan or tan poorly. Damage to eyes can occur to anyone regardless of eye colour.

Enjoy the Outdoors! Just Remember to be Sun Safe!