

Introduction

Dermatologists of The Los Angeles Metropolitan Dermatological Society are alarmed by the epidemic of skin cancer in this country. In the year 2002 more than one million Americans will be diagnosed with skin cancer. 9,800 will die from it. The incidence of malignant melanoma, the most deadly of common skin cancers, has been increasing at a rate faster than for any other type of cancer. We clearly have a very serious problem and one which is getting worse.

Why are so many skin cancers occurring? Studies have shown that childhood sun damage, particularly sunburning, is mostly to blame. The American Academy of Dermatology estimates that the average person acquires 80% of his/her lifetime total sun exposure prior to age 18. A peer-reviewed statistical analysis concludes that 78% of skin cancers could be prevented by sun avoidance and sun protection during childhood.

While sunlight has many obvious beneficial effects in nature, it can wreak havoc with human skin. The only known health benefit of sunlight on the skin is its role in the manufacture of Vitamin D. The American diet generally provides sufficient Vitamin D, or a daily multivitamin can be taken. By contrast, the sun's ultraviolet (UV) rays penetrate the skin's cells, causing mutations in some of the cellular DNA. As with other carcinogens, it may take many years of exposure or a long lag period before cancer occurs. Yet the evidence for this association is so strong that both the US National Institutes of Health (NIH) and the World Health Organization (WHO) list solar radiation as a "Known Human Carcinogen." This places UV radiation alongside other known carcinogens such as arsenic, tobacco smoke, and asbestos. Parents should do their best to educate and protect their children from carcinogens. Schools, camps, and parks share this responsibility during the time children are entrusted to their care. According to the CDC,

"Schools need to be sun-safe places to reduce children's exposure to UV radiation. Schools also can teach students the knowledge, motivation, and skills they need to adopt and maintain sun-safe behaviors for a lifetime. School-based programs on sun safety are an effective way to teach children at an early age how to protect themselves and help decrease their risk of developing skin cancer as adults."

Sun Safety for Kids provides detailed, user-friendly guidance covering all three of the major yet interconnected concerns which are crucial to a comprehensive sun safety program:

- * Educational Curriculum
- * Policy
- * Environmental Support

EDUCATIONAL CURRICULUM

Children, especially teenagers, commonly show little concern for how their behavior today might affect them in their later years, particularly if the consequences are somewhat vague to them. Many still think that a suntan makes them look more healthy and attractive without realizing that a tan is merely the skin's way of reacting to UV assault in its attempt to protect itself from further

damage.

Fortunately, excellent educational curriculum materials on sun protection for use by classroom teachers are available for all grade levels, Pre-school - 12. Very young children will not hear about cancer but will learn how to practice the most effective methods of sun protection. High school students, by contrast, will see a very graphic and shocking demonstration of the serious consequences of excessive sun exposure. This has been shown to have a significant impact on their attitude toward tanning.

We have evaluated available instructional materials and give recommendations appropriate for each grade level. At the secondary level, sun safety lessons fit well with health or science courses. Correlations of the recommended curricula with California educational standards are being developed and will be posted to this website as soon as available. Some of the curricula are free; none are expensive. Contact listings for more information and purchase are provided in the Curriculum section.

POLICY

Education, while certainly very important, will not be enough. This is why it is so important for schools to develop policies which will encourage and perhaps eventually require students to take sun-protective measures while in school. Even if some children don't fully comprehend the necessity for sun protection, they will directly benefit from an adequate school sun safety program since they will be exposed to less carcinogenic radiation during their time spent outdoors at school. Once habituated to sun safe practices as a result of the school policy, children may be more likely to take better precautions outside school as well.

The recent passage of SB310, which requires that California schools must allow pupils to wear a hat and sun-protective clothing when outdoors, will result in the need for revision of the dress code at most schools. This presents a timely opportunity for school administrators to consider the greater issue of sun safety and to install a comprehensive program of policy and curriculum to complement the accommodation of SB310, as outlined in the SSK Guide.

Australia, with the unfortunate honor of having one of the highest skin cancer rates in the world, has taken the lead in skin cancer prevention. Beginning in the early 1980's, the Sun Smart program for schools was developed which combines school policy changes and educational curriculum to promote sun protection. Their "Slip! Slap! Slop!" slogan reminds children that before going out to the school yard they should Slip! on a long sleeved shirt, Slap! on a hat, and Slop! sunscreen on uncovered areas. Australia's efforts are beginning to pay off as the latest statistics are showing a slight decrease in their skin cancer incidence.

Particularly here in Southern California, our sunny climate and our love for outdoor recreation present a compelling need for programs similar to those successfully established in Australia.

Considering the serious consequences of skin cancer and death from melanoma, schools, camps, and parks are urged to develop policies to protect children from solar assault while under their care.

One of the most difficult choices to make in formulating a sun safety policy will be to decide whether the children are permitted, are encouraged, are strongly encouraged, or are required to cover up and wear sunscreen when outdoors. In Australia, children are not permitted to play outdoors at "Sun Smart" schools unless they Slip! Slop! Slap! This would be the ideal goal for American children as well but depending on the initial level of motivation among students and their parents it might prove more successful to begin your sun safety program by emphasizing sun safety education and setting policies of relatively gentle encouragement combined with positive incentives. The degree of encouragement could gradually increase over time. Pre-school programs might choose right away to develop more strongly protective policies knowing that good habits acquired at a young age will likely carry on.

Our policy recommendations are divided into sections such as hats, sunscreen, long clothing, etc. In each section, background information is provided which includes a discussion of reasonable policy options. This is followed by a policy development worksheet in which options are presented in graduating degrees of strength for your consideration. You may adopt the ones best suited to your institution's circumstances or use them merely as a suggestion for writing your own policy in the blank space provided.

You will be prompted to consider sun safety policy for staff as well as children. This is important not only for the direct protection of staff personnel in the performance of outdoor duties but also because staff members serve as important role models for the children. For these reasons a higher level of safety compliance might be expected of the staff.

ENVIRONMENTAL SUPPORT

Environmental support refers to the ways in which shade options can be provided in order to lessen children's exposure to UV radiation.

Shade is a very important and highly desirable element at any school, camp, park, or recreational facility. Any outdoor area where children congregate or play could be evaluated for shade development. Lunch areas should definitely be covered. Consideration should be given to the feasibility of eventually providing shade for as many recreational areas as possible. Shade can be provided by trees, shade structures, or architectural elements.

Another method for providing environmental support is with the scheduling of outdoor activities. Resources are always limited but during the hours of highest UV intensity between 10:00 a.m. and 4:00 p.m. efforts should be taken to make as many indoor areas and indoor activities available to children as possible.

No existing tree should be removed without considering the impact it would have on shade reduction. The planting of new shade trees is highly recommended.

We provide specific references for shade structure dealers and for recommended shade trees including wholesale growers.

Dermatologists repeatedly hear the same refrain from skin cancer patients: "When we were

young, no one told us we should stay out of the sun." We hope that the current generation of children will be unable to make that claim when they grow up.

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Administration

Where and how to begin? The first and most important step in developing a sun safety program is simply to acknowledge the seriousness of the problem. Although skin cancer is the most preventable of all cancers, the incidence continues to rise relentlessly in our country, due mostly to sun exposure during childhood. If you agree that children deserve to be informed about the health threat of exposure to solar radiation, deserve to be educated about how to protect themselves and given opportunities to do so, then the conviction to develop a comprehensive sun safety program will naturally follow.

To begin, we recommend that a Sun Safety Committee be created. For schools, typically the Principal would establish the committee, name a coordinator, and allow the committee to provide guidance to the school's Governance Council. Candidates for the Coordinator position might include one of the school administrators, the school nurse, a physical education, health, or science teacher, or an officer of the P.T.A. Any member of the school staff who has had personal experience with skin cancer, or has a strong interest in skin cancer prevention, might be an ideal candidate to coordinate this new program.

The first challenge for the Sun Safety Coordinator will be to assemble a membership for the committee. The committee should provide representation from as many sectors of the school community as possible, e.g.:

- Administration
- Physical Education
- Health instruction
- Nursing
- Science instruction
- Parents
- Student leaders

We stress the importance of including students in the decision making process, particularly on issues such as hat and clothing policies. For example, the hats policy could flop if students perceived their only option to be "some dorky hat." Securing the cooperation of student leaders in choice and implementation will increase the probability of compliance by the general student body.

Once formed, the committee will be able to address and prioritize the various sun safety issues presented in this Guide.

SUN SAFETY PROGRAM

ADMINISTRATION WORKSHEET

POLICY RECOMMENDATION

WRITE YOUR POLICY

<hr/> <p>(Name of school) is dedicated to promoting sun safety for all students and staff.</p>	
<hr/> <p>(Name of individual & title, or committee) shall be responsible for monitoring and managing our school's sun safety program and policies.</p>	
Our Sun Safety program and policies will be reviewed, and necessary revisions made, on a regular basis at least every _____ months.	