



CDC's Guidelines for School Health Programs

Preventing Skin Cancer Among Young People

An Overview

Protection from ultraviolet (UV) exposure during childhood and adolescence reduces the risk for skin cancer in adults. More than 53 million young people spend a substantial proportion of their lives in schools, and some of that time will be spent outdoors under the sun. 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.

The Burden of Skin Cancer

- Skin cancer is the most common type of cancer in the United States. The two most common kinds of skin cancer are basal cell carcinoma and squamous cell carcinoma. Both are highly curable. More than 1 million cases of basal cell or squamous cell cancers occur annually in the United States. Melanoma, the third most common type of skin cancer and one of the most common cancers among young adults, is more dangerous.
- In 2002, an estimated 53,600 persons will be diagnosed with melanoma. An estimated 9,600 deaths will occur this year from skin cancer – 7,400 from melanoma and 2,200 from other skin cancers.
- In the United States, diagnoses of new melanomas are increasing, whereas diagnoses of most other cancers are decreasing. Between 65% and 90% of melanomas are caused by UV radiation.

How to Prevent Skin Cancer

Skin cancer is largely preventable by limiting exposure to the primary source of UV radiation: sunlight. Ultraviolet rays are an invisible form of radiation that come from the sun.

The most effective ways to reduce exposure to sunlight are to

- Minimize exposure to the sun during peak hours 10 a.m.– 4 p.m.
- Seek shade from the sun.
- Wear clothes and wide-brimmed hats that protect the skin and face.

- Wear wrap-around sunglasses that block close to 100% of UV rays.
- Use a broad-spectrum sunscreen that blocks both UVA and UVB rays and has a sun protection factor (SPF) of at least 15 or higher. Apply generously 30 minutes before going outside and reapply after swimming, exercising, or sweating.
- Avoid using sunlamps and tanning beds. They are also sources of UV radiation.

Childhood & Adolescent Ultraviolet (UV) Exposure

- A history of one or more sunburns (an indicator of intense UV exposure) in childhood or adolescence has been found to increase the risk of developing basal cell carcinoma and melanoma as an adult.
- Childhood is the most important time for developing moles, an important risk factor for skin cancer. There is some evidence that sun exposure in childhood heightens the risk of melanoma by increasing the number of moles.
- More than half of a person's lifetime UV exposure typically occurs during childhood and adolescence.
- Effective sun protection is practiced by less than one-third of U.S. youth.

Benefits of Promoting Sun-safety in Schools

- Behavior changes can be accomplished through classroom lessons, as well as through school policies and practices related to outdoor activities.
- Schools can set a powerful example for students, families, and the entire community by actively promoting sun safety.



Students practicing sun safety by wearing hats, sunglasses and applying sunscreen.

Photo courtesy of the US Environmental Protection Agency, SunWise School Program.

CDC's School Guidelines for School Health Programs



CDC's "Guidelines for School Programs to Prevent Skin Cancer" were designed to provide schools with a comprehensive approach to preventing skin cancer among adolescents and young people. CDC worked with specialists in dermatology, pediatrics, public health, and education from universities; national, federal, state, and voluntary agencies; schools; and other organizations to develop these guidelines. They are based on a review of research, theory, and current practice in skin cancer prevention, health education, and public health.

Key Principles



- Skin cancer is the most common type of cancer, and new cases and deaths from melanoma, the deadliest form, have been increasing dramatically.
- Exposure to the sun during childhood and adolescence typically plays a critical role in the development of skin cancer as an adult.
- To be most effective and efficient, school-based approaches to skin cancer prevention should be implemented as part of a coordinated school health program. No single strategy in isolation can solve the problem.
- Schools can do a variety of activities to prevent skin cancer. First and foremost, schools can create supportive, caring environments that make skin cancer prevention a priority.



Recommendations

CDC's guidelines include seven recommendations for schools from prekindergarten through the 12th grade and are meant to encourage skin cancer prevention on school property and elsewhere. The recommendations are as follows:



Policy: Establish policies that reduce exposure to ultraviolet (UV) radiation.

- Encourage scheduling of outdoor activities during times when the sun is not at peak intensity, when possible.
- Modify building and grounds codes to increase availability of shade in frequently used outdoor spaces.
- Encourage or require students to wear protective clothing, hats, and sunglasses.
- Establish sunscreen-use routines before going outside.
- Support health education activities needed for skin cancer prevention.
- Disseminate skin cancer prevention information to families.
- Develop guidance for allocation of resources for skin cancer prevention.



Environment: Provide and maintain physical and social environments that support sun safety and are consistent with the development of other healthy habits.

- Consider sun protection in the design of new schools.
- Identify opportunities to extend or create new shaded areas.
- Work with community partners to facilitate provision of sunscreen at a reduced price or fee.
- Use visual and audio messages to remind students to engage in sun-safe behaviors.
- Encourage all adults to be sun-safe role models.
- Have peer educators teach students about sun safety.
- Recognize staff and students who practice sun safety.

Education: Provide health education to teach students the knowledge, attitudes, and behavioral skills they need to prevent skin cancer. This education should be age-appropriate and linked to opportunities for practicing sun-safe behaviors.

- Include skin cancer prevention as part of a comprehensive health education curriculum.
- Integrate skin cancer prevention into other subject areas as well.
- Provide skin cancer education sequentially and reinforce key messages over time, from prekindergarten through 12th grade.
- Deliver skin cancer education during times of the year when students have the most opportunities for sun exposure and sun protection.

Families: Involve family members in skin cancer prevention efforts.

- Educate parents about the importance of sun-safe behaviors.
- Inform parents about school initiatives and policies and obtain their input.
- Encourage parents to advocate for sun-safe policies and practices in the school.

Professional

Development: Include skin cancer prevention knowledge and skills in preservice and inservice education for school administrators, teachers, physical education teachers and coaches, school nurses, and others who work with students.

- Integrate skin cancer prevention into existing professional development activities.
- Tailor professional development activities to the responsibilities of the audience.

Health Services: Complement and support skin cancer prevention with school health services.

- Include parental permission for use of sunscreen in the health record.
- Use sports participation checkups to educate students about skin cancer prevention.
- Assess patients' sun exposure patterns and reinforce sun-protective behaviors.
- Advocate for skin cancer prevention policies and practices.

Evaluation: Periodically evaluate whether schools are implementing the skin cancer prevention guidelines. They should be evaluated on policies, environment, education, family involvement, professional development, and health services.

These seven recommendations represent the state-of-the-science in school-based skin cancer prevention programs. However, every recommendation is not appropriate or feasible for every school to implement. Therefore, schools should determine which recommendations have the greatest priority based on the needs of the school and the students, and the available resources.

For More Information

For additional information or a copy of *Guidelines for School Programs to Prevent Skin Cancer*, contact the Division of Cancer Prevention and Control (DCPC) or the Division of Adolescent and School Health (DASH), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention at:

Web addresses: <http://www.cdc.gov/cancer/> or <http://www.cdc.gov/nccdphp/dash/>

Toll-free phone numbers: 1-888-842-6355 or 1-888-231-6405

E-mail addresses: Cancerinfo@cdc.gov or HealthyYouth@cdc.gov

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