Comprehensive Cancer Control: Engaging Schools and Education Partners in Sun Safety and Skin Cancer Prevention

# Sun Safety for America's Youth Toolkit

#### **July 2009**

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SUN SAFETY FOR AMERICA'S YOUTH TOOLKIT

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## About the Sun Safety for America's Youth Toolkit

Since 1998, the National Comprehensive Cancer Control Program (NCCCP) has provided funding and technical support to develop and implement comprehensive cancer control (CCC) plans to "reduce cancer incidence, morbidity, and mortality through prevention, early detection, treatment, rehabilitation and palliation."<sup>1,2</sup> Currently the Centers for Disease Control and Prevention (CDC) Division of Cancer Prevention and Control (DCPC) "funds CCC programs in all 50 states, the District of Columbia, 7 tribes and tribal organization and 7 U.S. territories."<sup>3</sup>

The CCC program in each state/tribe/territory/jurisdiction has a mandate to develop a plan that addresses a wide variety of cancer prevention and control priorities. This often includes skin cancer prevention. The Sun Safety for America's Youth Toolkit is designed as a resource for state/tribe/territory/ jurisdiction CCC programs interested in engaging schools and other education partners in sun safety efforts to reduce their state/tribe/territory/ jurisdiction's incidence of skin cancer. Since a majority of sun exposure occurs during childhood and early adulthood<sup>4</sup> and key sun protective behaviors can most easily be established at this time, addressing sun safety for young people is an important cancer control objective.

There is a wide variety of sun safety programs, materials, and resources available to organizations interested in implementing sun safety efforts, many of which are described in this toolkit and the accompanying reference documents. This toolkit builds upon lessons learned from CDC's long history of sun safety and skin cancer prevention. In 2002, CDC released the *Guidelines for School Programs to Prevent Skin Cancer*.<sup>5</sup> The Guidelines provide resources and suggestions for schools to improve sun safety practices in seven major areas: policy, environmental change, education, family involvement, professional development, health services, and evaluation. To foster implementation of these guidelines, DCPC, in partnership with the Division of Adolescent and School Health (DASH), made funds available to states with Coordinated School Health Programs (CSHPs) to conduct pilot skin cancer prevention activities. In

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2003, through the Skin Cancer Priority Supplement to PA03004—Improving the Health, Education, and Well-Being of Young People through Coordinated School Health Programs—three states (Colorado, Michigan, and North Carolina) were awarded funds to pilot activities to address the school skin cancer guidelines. From late 2003 through early 2007, the Department of Education in each of the three funded states received funds to implement their pilot sun safety initiatives. Each state was required to develop an annual work plan that would guide their efforts to address CDC's skin cancer guidelines and develop a partnership with their state CCC program.

This toolkit draws from these efforts and is designed to provide CCC programs with resources and information that will help them to understand the burden of skin cancer within their state/tribe/territory/jurisdiction, assess current state/ tribe/territory/jurisdiction-level sun safety interest and activity, engage in implementation of sun safety efforts with schools and key education partners, and evaluate their efforts.

The toolkit consists of four key steps that will help CCC programs move through a logical process for engaging and implementing sun safety efforts for young people:

- Step I: Identify and Recruit Sun Safety Partners
- Step II: Assess and Understand Sun Safety Needs and Resources in Your State/Tribe/Territory/Jurisdiction
- Step III: Plan and Implement Sun Safety Activities
- Step IV: Evaluate Sun Safety Efforts

Step I describes the numerous organizations and individuals CCC programs may want to engage in sun safety planning and implementation. These partners represent both state/tribe/territory/jurisdiction and local organizations that can play an important role in reaching schools and young people to implement and enhance effective sun safety strategies.

Step II provides recommendations for understanding the current state skin cancer burden and how to utilize that information to inform the development and targeting of sun safety efforts. To understand the current level of sun safety activity within the state/tribe/territory/jurisdiction, recommendations and resources are provided for conducting a sun safety program and resource inventory at the state/tribe/territory/jurisdiction level. Resources are also provided to help your CCC program understand the current legal and/or policy issues related to sun safety and how sun safety may already be integrated into existing school resources and tools.

Step III outlines a process for conducting a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis related to implementation of sun safety activities. Recommendations and resources on selection of sun safety activities are provided as well as examples of activities implemented using the *CDC Guidelines for School Programs to Prevent Skin Cancer*.

Step IV highlights the importance of evaluation of state/tribe/territory/ jurisdiction sun safety efforts and offers some examples of how to evaluate sun safety efforts locally and at the state/tribe/territory/jurisdiction level. We also provide suggestions for modification of state surveillance systems.

Within each step, we provide examples from state sun safety efforts to help CCC programs understand how these recommendations, tools, and resources have been utilized by other states.

The toolkit also includes an extensive sun safety resource list, which highlights potential sun safety partners at the state/tribe/territory/jurisdiction and national levels, and other sun safety programs and materials that are currently available.

## Why Is Sun Safety Important for Young People?

Skin cancer is the most common type of cancer and is thought to account for half of all cancers.<sup>6,7</sup> About one million cases of basal cell or squamous cell cancers, the two most common types of skin cancer, are diagnosed each year. Melanoma, the third most common type of skin cancer,<sup>5</sup> accounts for less than 5% of skin cancer cases but causes a majority of skin cancer deaths.<sup>6,7</sup>

Although children are not commonly diagnosed with skin cancer, it is during childhood that much of one's lifetime sun exposure occurs and when important protective behaviors can be established. Approximately 65%–90% of melanomas are caused by ultraviolet (UV) radiation,<sup>5</sup> and because a substantial percentage of lifetime sun exposure occurs before age 20,<sup>4</sup> UV radiation exposure during childhood and adolescence plays an important role in the development of skin cancer.<sup>8</sup> Persons with a history of more than one blistering sunburn during childhood or adolescence are at a greater risk for developing basal cell carcinoma<sup>9</sup> and are two times more likely to develop melanoma than those without such exposures.<sup>5</sup>

## Why Is It Important to Work with Schools?

Sun exposure preventive behaviors can yield the most positive effects if they are initiated early and established as healthy and consistent patterns throughout life.<sup>5</sup> In 2003, the U.S. Community Preventive Services on Reducing Exposure to Ultraviolet Light recommended that primary schools implement educational and policy strategies to improve behaviors that reduce exposure to UV light by covering exposed skin and therefore preventing skin cancer.<sup>10</sup> Because much time during childhood and adolescence is spent at school, schools provide a favorable environment in which to teach and model healthy behaviors.

There are approximately 50 million students attending more than 98,000 schools nationwide.<sup>11</sup> Schools therefore provide the most far-reaching access to young people. Schools can play a critical role in educating young people about their health and ensuring that they have a healthy environment when

they are at school and engaged in school activities. However, it is important to acknowledge that schools are faced with the challenge of maintaining high academic standards and addressing a wide variety of health priorities with limited time and resources. Therefore, identifying opportunities to integrate sun safety into existing resources, activities, and curricula is critical to successful implementation and sustainability and to reducing burden on school partners.

In addition to schools, there are numerous other community organizations that provide services to young people and thus have an opportunity to educate them about the importance of sun safety. These organizations include parks and recreation departments, summer camps, museums, health education centers, and others. Because of the important role these organizations and groups serve, they have been included as potential partners for any state/tribe/ territory/jurisdiction sun safety effort.



## Step I: Identify and Recruit Sun Safety Partners

When preparing to engage in a sun safety effort, CCC programs can complement their own cancer control expertise by identifying and engaging additional partners who are knowledgeable and skilled in working with schools and young people. Such partnerships represent an opportunity for experts in cancer control and education to bring their respective areas of expertise together to identify strategies that can be implemented in a manner that reduces the burden on the educational system. These partners can facilitate sun safety activities in a number of ways, including

- building upon existing relationships to reduce potential barriers and reluctance by schools administrators and teachers to add sun safety to an already full agenda,
- serving as critical links to educate and improve school awareness and knowledge of the importance of sun safety,
- identifying opportunities to integrate sun safety into existing school programs and curriculum, and
- serving as sun safety advocates within their own organizations.

## Develop Partnerships to Facilitate Sun Safety Planning and Implementation

In 2008, DCPC developed a *Partnership Tool Kit: Program Version*<sup>12</sup> that helps programs navigate the process of
determining the need for a partnership,
developing a partnership,
evaluating a partnership, and
sustaining a partnership.
This tool is recommended to CCC programs to help engage partners in skin cancer prevention efforts. Key aspects of this tool are included in this toolkit,

but programs are encouraged to refer to the *Partnership Tool Kit: Program Version* for additional details and guidance.

When determining the need for a partnership, programs should consider the following questions:

- What specific outcomes or products does your program hope to achieve through partnerships?
- In what ways do you need partnerships to achieve the identified outcomes or products?
- How would partnerships provide additional expertise rather than duplicating expertise in your program?

Programs can then move toward developing a new partnership. Potential questions to consider at this stage include the following:

- What potential partners has your program identified?
- In what ways could nontraditional partners be helpful in a new partnership?
- What does your program aim to achieve by working with these potential partners?
- How will these potential partners complement and strengthen your program?
- What might be some potential drawbacks to working with these potential partners?
- How would these potential partners help your program better achieve your goals and objectives?
- What might your program and the potential partners gain through this partnership?
- What resources does your program have available to contribute to new partnerships?
- Is there an existing state-level school health coordinating committee?



## Identify Other State/Tribe/Territory/Jurisdiction Partners to Engage in Sun Safety Planning

After assessing the need for additional partners and partnerships to promote a state/tribe/territory/ jurisdiction sun safety effort, CCC programs can identify a number of other state government agencies and programs that may serve as

critical stakeholders and resources. The list below includes some examples of possible state-level partners that could be engaged in sun safety efforts. This list is not exhaustive, so each CCC program should identify other resources and partners specific to their state/tribe/territory/jurisdiction.

**State Department of Education:** The State Department of Education is an important stakeholder when addressing any issue that impacts young people. Twenty-two states and one tribal government are funded to build the capacity of their school systems through CDC's Coordinated School Health Program (CSHP).<sup>13</sup> The CSHP model consists of eight key components for a comprehensive health program: health education, physical education, health services, nutrition services, counseling and psychological services, healthy school environment, health promotion for staff, and family/community involvement. State health and education agencies are encouraged to develop an ongoing partnership to facilitate the implementation of effective policies and practices to promote the health and well-being of students and staff.



#### Figure 1. Coordinated School Health Programs (CSHP)

Note: State Education Agencies (SEA) that receive DASH funding are shaded. The tribal government from Nez Perce also receives CSHP funding. Source: CDC Coordinated School Health Program <a href="http://www.cdc.gov/healthyyouth/partners/funded/cshp.htm">http://www.cdc.gov/healthyyouth/partners/funded/cshp.htm</a>.

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With or without funding for a CSHP, the State Department of Education represents a key partner in sun safety for young people and can provide valuable linkages, insight, and resources for engaging schools in sun safety. While health education classes are perhaps the most traditional mechanism for providing education on a particular topic, they are not the only avenues to be explored. Department experts or leaders in physical education, physical activity/wellness, school health services, and after-school activities are natural partners as they can incorporate sun safety into physical education classes and school sports activities. Sun safety can also be incorporated into a number of other academic areas, such as science and math (see the *Guidelines for School Programs to Prevent Skin Cancer* for additional information on incorporation of sun safety into various curricula); thus, it is important to try to identify partners beyond just the health education curriculum.

**State Agency that Regulates Commercial Tanning Facilities:** Every state has a state agency that is responsible for oversight, certification, and regulations related to indoor tanning/commercial tanning facilities (i.e., tanning beds). While not directly related to the schools, these organizations provide oversight to ensure that tanning facility staff are trained and that any state laws to protect minors from tanning are adhered to. Representatives from these agencies can be valuable partners for enforcement of existing state tanning laws or for development of such legislation if it does not already exist. A list of all state agencies responsible for commercial tanning facilities oversight can be found at http://www.tanningtraining.com/reginfo/state.html.\*

**State Medical Associations:** Clinical partners can play an important role in advocating for sun safe behaviors with adults and young people.

- The National Association of School Nurses has affiliate school nurse organizations in 49 states (there is no affiliate in Hawaii) and the District of Columbia. State affiliate information can be found at <u>http://www.nasn.org/Default.aspx?tabid=60</u>.\* School nurses play an important role in training teachers and students about practicing sun safe behavior and, in some cases, may have the responsibility of administering sunscreen to students.
- The American Academy of Dermatology (AAD) has affiliate State Dermatology Society organizations that can provide resources and support to sun safety efforts. AAD offers the Seal of Recognition Program and the

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Skin Cancer Awareness: Intervention Plan for Tomorrow (SCRIPT) Plan. The SCRIPT Plan includes a shade structure grant program, free skin cancer screenings, advocacy for federal and state legislation to regulate indoor tanning, paid and public service advertising, and sun safety resource materials. More information on AAD and its resources can be found at http://www.aad.org/index.html.\*

The American Academy of Pediatrics (AAP) has state chapters across the United States. AAP endorses a policy statement titled Ultraviolet Light: A Hazard to Children. Pediatricians can provide valuable information to children and parents on sun safety and can be a valuable advocate for passing state laws addressing skin cancer and skin cancer prevention. A list of state chapters can be found at <a href="http://www.aap.org/member/chapters/chapters.htm">http://www.aap.org/member/chapters.htm</a>.\*

**State Athletic and Coaching Associations:** Young people are exposed to the sun during a variety of outdoor activities, including participation in school or community athletic activities. Including partners who represent state athletic and coaching associations provides a valuable resource for educating adults who oversee thousands of children during outdoor sports and athletic events about the importance of sun safety while on the field.

 The National Federation of State High School Associations includes member associations in each of the 50 states and the District of Columbia. A list of member associations and their contact information can be found at <u>http://www.nfhs.org/stateassociations.aspx</u>.\*

**Colleges and Universities:** State colleges and universities often have a variety of experts, resources, and programs addressing sun safety, including

- Cooperative Extension Services,
- schools of medicine,
- schools of nursing, and
- schools of public health.

**American School Health Association (ASHA):** ASHA has state constituent chapters in 12 states and has passed a resolution supporting sun safety school policies and education to prevent skin cancer. A list of member associations can be found at <u>http://www.ashaweb.org/i4a/pages/index.cfm?pageid=3317</u>.\*

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**Parent Teacher Association (PTA):** The national PTA places an emphasis on healthy youth, and state PTA chapters can be valuable partners in implementing sun safety activities. State PTA chapters have access to local PTA chapters whose members can be educated to become suns safety advocates within their own school chapters. State PTAs can also pass resolutions and position statements in support of sun safety. State and local PTA chapters can be found at <u>http://pta.org/jp\_find\_your\_pta.html</u>.\*



## Identify Local Partners to Engage in Sun Safety Planning

Depending on the sun safety approach and activities to be implemented, many CCC programs may also choose to engage local partners in their sun safety planning and activities. In many cases, local partners may be members or affiliates of state-level organizations that have already become engaged as sun safety partners. Local PTA chapters and individual health care providers are two examples of local organizations/members that may be closely affiliated with state-level organizations. There are a number of other local partners that can be engaged in sun safety planning and implementation.

Schools: Public, private, and alternative schools are perhaps the most obvious partners to engage in sun safety efforts, but also the most challenging. Learning how schools work is an important first step to working effectively with schools.<sup>14</sup> Because many policies impacting schools are implemented at the school level, it is often critical to work directly with schools and school administrators to integrate sun safety into school policies, curricula, and activities. Schools are faced with the task of addressing numerous student health issues while meeting or maintaining high academic standards. Gaining access to schools is often difficult and is most easily done by individuals and organizations that have preexisting relationships with schools and school administrators. While many schools are familiar with student health issues such as tobacco and drug use, obesity, physical activity, nutrition, and asthma, most schools are less familiar with the issue of sun safety. Engaging schools often requires time and resources to educate school decision makers on the importance of sun safety for their students and the approaches that a school can implement to protect students from the sun while in their care. Many schools have school health teams, and districts have school health councils that meet regularly to discuss school health problems and plans for improvement.

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While the resources may not always be available, it is beneficial when even relatively small amounts of funding can be provided to schools interested in making improvements in sun safety policies, erecting or planting shade structures, or conducting education and awareness events and activities.

**Local Education Agencies (LEAs):** LEAs reside between individual schools and the Department of Education at the state level. LEAs are often considered school districts and provide administrative oversight to public schools in a particular geographic area. Like individual schools, LEAs can serve to provide leadership and guidance on school sun safety policies, shade planning, and curricula.

**County or Area Parks and Recreation Organizations:** While not directly related to schools, area parks and recreation organizations serve youth across the country, providing recreational sports activities, parks, and summer camps. Parks and recreation staff and the young people they oversee can benefit from educational and policy sun safety efforts. The National Recreation and Park Association was a sponsor of the Pool Cool sun safety effort aimed at improving sun safety behaviors of pool users. More information on Pool Cool can be found at <a href="http://www.poolcool.org/">http://www.poolcool.org/\*</a>

**Health Education Centers:** The National Association of Health Education Centers seeks to support and promote organizations that provide health education programs. Thirty-eight member organizations can be found in 22 states and the District of Columbia. A list of health education centers can be found at <u>http://www.nahec.org/documents/2007AnnualReport.pdf</u>.\*

**Parent Teacher Organizations (PTOs):** Many schools have parent groups that are not affiliated with the national PTA; these groups are often called PTOs. There is no national or state PTO, but each PTO is independently organized and operated.

**Other Community-based Organizations:** Many other types of organizations that serve young people can be included in sun safety planning and program implementation, including the following:

- YMCA: <u>http://www.ymca.net/</u>\*
- YWCA: <u>http://www.ywca.org/</u>\*

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- Boys/Girls Clubs: <u>http://www.bgca.org/</u>\*
- Boy Scouts: <u>http://www.scouting.org/</u>\*
- Girl Scouts: <u>http://www.girlscouts.org/</u>\*
- Museums, especially those with outdoor activities: <u>http://www.muse-umca.org/usa/states.html</u>\*
- Zoos, aquariums, and amusement and water parks: http://www. themeparkcity.com/USA\_index.htm\*
- Minor league ball parks: http://www.littleballparks.com/\*
- Public or community pools

### **Lessons from the field**

- Recognize that cancer control and education organizations have different structures, resources, and sometimes languages. It is important to take the time to learn what they are and how they can be used most effectively to promote sun safety efforts.
- Nurture the partnership through communication, development of goals, and setting timelines.
- Include partners who are familiar with education agencies at the local level so they can share what might and might not work with local sun safety efforts. These relationships can also help engage key school personnel who may serve as advocates or potential gatekeepers.
- Work with partners to create a plan of action, rather than approaching partners once a plan has been developed.
- Many potential partners and stakeholders are not knowledgeable about the issue of sun safety. There needs to be an effort to educate and improve awareness to recruit partners before many will be willing to engage in activities.
- Plan for sustainability from the beginning. Look closely at what kinds of activities and partnerships can help ensure financial and programmatic longevity.

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Step II. Understand Sun Safety Needs and Resources in Your State/ Tribe/Territory/Jurisdiction

Once major partners are identified, CCC programs should undergo a process for understanding the sun safety needs, skin cancer burden, and existing sun safety resources within their state/tribe/territory/jurisdiction. Every state/tribe/ territory/jurisdiction will have different types of resources already dedicated towards sun safety; thus, prior to implementing new interventions and activities, it is valuable to work with partners to conduct an assessment of what sun safety efforts are currently in place. This assessment can then be used to identify potential gaps in resources and sun safety needs and priorities.

Within Step II, we will provide recommendations on the following:

- assessing and understanding the skin cancer burden in your state/tribe/ territory/jurisdiction,
- conducting a state/tribe/territory/jurisdiction-level sun safety inventory of existing programs and resources, and
- understanding your state/tribe/territory/jurisdiction's legal and/or policy issues related to sun safety.



## Assess and Understand the Skin Cancer Burden in Your State/Tribe/Territory/Jurisdiction

Assessing the burden of skin cancer in your state/tribe/territory/jurisdiction will allow your CCC program to prioritize strategies and interventions, and help focus efforts on particular programmatic and geographical areas with the greatest need. As most CCC programs are aware, there are a variety of national databases that provide state/tribe/territory/jurisdiction–specific data on the burden of skin cancer; however, tribe, territory, and jurisdiction data is not as easily available.

National Cancer Institute and Centers for Disease Control and Prevention State Cancer Profiles: The objective of the State Cancer Profiles website is to provide a system to characterize the cancer burden in a standardized



manner in order to motivate action, integrate surveillance into cancer control planning, characterize areas and demographic groups, and expose health disparities. The focus is on cancer sites for which there are evidence-based control interventions. Interactive graphics and maps provide visual support for deciding where to focus cancer control efforts. The State Cancer Profiles can be found at http://statecancerprofiles.cancer.gov/.

**United States Cancer Statistics:** This web-based report includes the official federal statistics on cancer incidence from registries that have high-quality data and cancer mortality statistics for each year and for 2001–2005 combined. It is produced by CDC and the National Cancer Institute (NCI), in collaboration with the North American Association of Central Cancer Registries (NAACCR).<sup>1</sup> The United States Cancer Statistics can be found at <u>http://apps.nccd.cdc.gov/uscs/</u>.

Data relating to the burden of skin cancer in your area can also be found in state, territory, and jurisdiction-based resources, including your state's cancer registry. The National Program of Cancer Registries (NCPR) and NCI's Surveillance, Epidemiology, and End Results (SEER) Program together fund 50 states, the District of Columbia, Puerto Rico, the U.S. Pacific Island Jurisdictions, and six metropolitan areas to conduct surveillance and develop and maintain a cancer registry for the area. Contact information for each state/ territory/jurisdiction cancer registry can be found at <u>http://apps.nccd.cdc.gov/</u> <u>cancercontacts/npcr/contacts.asp</u>. Information on the NCPR can be found at <u>http://www.cdc.gov/cancer/npcr/</u>, and information on the SEER Program can be found at <u>http://seer.cancer.gov/about/index.html</u>.

Other tools are also available to help demonstrate the burden of skin cancer in your area.

**Cancer Mortality Maps and Graphs:** This site, sponsored by NCI, provides valuable information about cancer mortality in the United States during the time period 1950–1994, based on data obtained from the National Center for Health Statistics (NCHS). Cancer Mortality Maps and Graphs provides interactive maps, graphs, text, tables, and figures showing geographic patterns and time trends of cancer death rates for more than 40 cancers for the 50 states. This is found at <u>http://www3.cancer.gov/atlasplus/</u>.

Skin cancer risk factor data is more difficult to obtain.

<sup>&</sup>lt;sup>1</sup> U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999–2005 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2009. Available at: <u>www.cdc.gov/uscs</u>.



**Youth Risk Behavior Survey (YRBS):** The YRBS monitors priority health-risk behaviors among young people in grades 9-12. It has included the following questions regarding routine sunscreen use and routine practice of sun safety behaviors for the previous two iterations (2005 and 2007):

- When you are outside for more than 1 hour on a sunny day, how often do you wear sunscreen with an SPF of 15 or higher?
- When you are outside for more than 1 hour on a sunny day, how often do you do one or more of the following: stay in the shade, wear long pants, wear a long-sleeved shirt, or wear a hat that shades your face, ears, and neck?

In 2007, the YRBS was conducted in 44 states (although 5 states, Alabama, Colorado, Nebraska, New Jersey, and Oregon, did not obtain weighted data), the 22 districts, including the District of Columbia, and 5 territories and jurisdictions (Territory of Guam, Territory of American Samoa, Commonwealth of the Northern Marianas Islands, Republic of the Marshall Islands, and Republic of Palau). Information on the YRBS at the state and national level can be found at <a href="http://www.cdc.gov/HealthyYouth/yrbs/index.htm">http://www.cdc.gov/HealthyYouth/yrbs/index.htm</a>.

Several states, including Colorado, Florida, and New Mexico, have included skin cancer risk factor and sun safety related question in their Behavioral Risk Factor Surveillance Survey (BRFSS) during specific years. These questions can be found in Section 6 of this toolkit (Step IV).

Another data source that can be used to help your CCC program to prioritize strategies and target efforts on particular areas with the greatest need are school-based information systems. These systems can inform CCC programs about the location and demographic make-up of the schools in their area.

**School District Demographic System (SDDS):** The SDDS provides access to information about demographics, social characteristics, and economics of children and school districts from the U.S. Department of Education's National Center for Education Statistics (NCES). The SDDS enables users to directly access school district geographic and demographic data. This can be found at <a href="http://nces.ed.gov/surveys/sdds/">http://nces.ed.gov/surveys/sdds/</a>.

## Lessons from the field

- Understanding the skin cancer burden in your state can help your CCC program target limited resources toward the areas with greatest need. For example, if funds are available for mini-grants to schools, recruit schools from counties or geographic areas with the greatest prevalence of melanoma.
- If your state does not currently collect data on skin cancer or sun safety behaviors, adding questions to surveillance tools can help with understanding the state skin cancer burden and with evaluation of your sun safety efforts. These data can also be used to help demonstrate need, a critical requirement when identifying funding opportunities.

## Conduct a Sun Safety Inventory: What Do We Already Know about the Available Resources around Sun Safety in our State/Tribe/Territory/Jurisdiction?

Conducting a sun safety inventory will help your CCC program understand what types of activities and resources are currently available to schools and programs that serve young people. The partners identified in Step I are extremely valuable in completing this inventory as they will be able to provide insight and information about any existing sun safety efforts currently being implemented by their organizations and partners. Once an inventory is completed, the information can be analyzed and used to identify needs and/or gaps that your CCC program's sun safety efforts can work to address, thus ensuring that sun safety resources are used wisely and do not duplicate existing efforts.

Your inventory may include a number of different resources, several examples of which are provided below. In addition, a sample sun safety inventory tracking template is included as part of this toolkit.

#### **Existing Sun Safety Programs In Your State/Tribe/Territory/Jurisdiction:**

There are a variety of well known sun safety programs and curricula used by schools and other community partners engaged in addressing sun safety for young people. When planning CCC sun safety activities, it is helpful to know if these programs and resources are already being used. Both the SunWise program and Sunny Days Healthy Ways are examples of programs that are recommended by the *Guide to Community Preventive Services*.<sup>10</sup>

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**SunWise:** The U.S. Environmental Protection Agency's (EPA's) SunWise program is a free, school-based sun safety program that currently engages schools in all 50 states and the District of Columbia (<u>http://www.epa.gov/sunwise/summary.</u> <u>html</u>). The program is directed at educators in grades K-8 and includes a variety of materials and resources for the classroom, school, and community. Schools can register to be a SunWise school by completing a registration form online. As of 2008, 18,000 schools and more than one million students were engaged in SunWise (EPA, <u>http://www.epa.gov/sunwise/evaluation.html</u>). In spring 2009, CDC provided technical assistance to EPA as they began developing specific sun safety fact sheets for each state in the U.S.; the first fact sheets will be available soon at <u>http://www.epa.gov/sunwise/</u>.

As a part of your CCC program sun safety assessment, the SunWise program can provide your CCC program with a list of the schools that have registered with SunWise. While this does not ensure that a school is implementing all components of SunWise, it can serve as an indicator of school interest in sun safety and may help to target resources appropriately.

**Sunny Days Healthy Ways:** The Sunny Days Healthy Ways curriculum is designed for students and educators in grades K-8. The curriculum provides a wide variety of resources that can be tailored to the specific needs of schools and teachers. The curriculum also provides resources on incorporating sun safety into a variety of national and state health and science education standards (http://sdhw.info/standards/3\_standards.asp).\*

As a part of your CCC program sun safety assessment, the Sunny Days Healthy Ways program administrator, Klein Buendel, Inc., can provide you with a list of the schools that have purchased the Sunny Days Healthy Ways curriculum. As with SunWise, this does not ensure that a school is implementing all components of Sunny Days Healthy Ways it can serve as an indicator of school interest in sun safety and may help to target resources appropriately.

Another popular sun safety campaign is the *Slip, Slop, Slap* sun safety media campaign and materials from Australia. Having launched Slip, Slop, Slap in 1981, Australia has one of the most well-established sun safety programs. This campaign encourages people to slip on a shirt, slop on some sunscreen, and slap on a hat. Most recently, the campaign has added seek shade and slide on some sunglasses.<sup>15</sup> This campaign has been used in several U.S. states and has been very successful in Australia. In addition to Slip, Slop, Slap, the Cancer

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Council Australia has a SunSmart Schools program that has engaged 2,500 schools and 3,500 daycare centers across the country.<sup>16</sup>

Other sun safety programs and resources that may be identified through an inventory include those presented in Table 1.

Program	Sponsoring Agency	Website Information
Pool Cool	Rollins School of Public Health and the National Recreation and Park Association	http://www.poolcool.org/index.html*
Sun Safe for the Early Years and SunSafe in the Middle School Years	Norris Cotton Cancer Center	http://www.cancer.dartmouth.edu/melanoma/ sunsafe_early.shtml* http://www.cancer.dartmouth.edu/melanoma/ sunsafe_middle.shtml*
Block the Sun, Not the Fun	The Sun Safety Alliance	http://www.sunsafetyalliance.org/block_the
Project S.A.F.E.T.Y (Sun Awareness For Educating Today's Youth)	M.D. Anderson Cancer Center	http://www.mdanderson.org/patient-and- cancer-information/cancer-information/cancer- education/prevention-programs/project-safety/*

 Table 1. Sun Safety and Skin Cancer Prevention Programs for Young People

**Organizations Already Engaged in Sun Safety:** Step I of this toolkit provides examples of organizations that could be included as key sun safety partners. Many of the key organizations engaged in sun safety may have already been identified through this process. Additional organization may be identified by working with your state/tribe/territory/jurisdiction partners to brainstorm other potential organizational sun safety resources.

**Financial Resources for Sun Safety Activities:** Identification of financial resources for implementation of sun safety efforts is often a critical component that determines whether schools and other organizations implement sun safety activities. A wide variety of free or inexpensive program materials are available to organizations interested in implementing sun safety activities, policies, and curricula. Many of these materials can be easily downloaded via the Internet. See the list of program resources included in this toolkit for links to many of these materials.

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For projects around shade planning, a few grants and funding opportunities are available from national sun safety partners. The American Academy of Dermatology offers a small number of shade structure grants directly to schools each year, but these grants are highly competitive. Similarly, the SHADE Foundation of America offers occasional funding for the construction of shade structures at schools and play areas.

#### Sun Safety in Existing School Resource Materials and Education Standards:

In many states, the Department of Education has incorporated sun safety and skin cancer prevention into existing standard course of study materials, curriculum standards, and benchmarks. Sun safety has also been incorporated into many of the national health education standards and proficiency indicators (www.cdc.gov/healthyyouth/sher/standards/index.htm) and science education standards. An inventory should look to identify where sun safety is already included in school resources and standards and to identify potential opportunities for sun safety to be incorporated.

Human Resources: Because skin cancer affects millions of people across the United States, it is not difficult to find valuable advocates for skin cancer prevention and promotion of sun safety. These advocates can be found serving as school teachers, nurses and administrators, dermatologists, pediatricians, parents, grandparents, and skin cancer survivors. The identification and involvement of sun safety champions can be a valuable resource for implementation of sun safety activities. School health advocates often serve on district-level school health councils and school-level health teams.



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## Understand Your State/Tribe/Territory/Jurisdiction's Legal and/or Policy Issues Related to Sun Safety

There are a variety of legal and policy issues related to sun safety and skin cancer prevention that are important to understand and consider during the planning phase of any state sun safety effort.

Legislation Related to Sun Safety: As of March 2009, 26 states had passed legislation regarding skin cancer or skin cancer prevention. This legislation is summarized in Table 2. Twenty-five states currently have legislation addressing access to and use of indoor tanning facilities. Between February and March 2009, three states (Montana, South Dakota, and Wyoming) failed to pass similar proposed legislation. Two states, Florida and New York, have passed laws promoting or requiring skin cancer education in schools.<sup>17</sup> A much smaller number of states have passed legislation regarding prevention, school health, skin cancer awareness, and skin cancer screening reimbursement.



## Table 2. States with Laws Addressing Skin Cancer and Skin CancerPrevention (enacted through March 2009)

State	Tanning Facilities	Prevention	School Health	Awareness	Health Education	Screening Reimbursement
Arizona	•	•	•			
Arkansas	•					
California	•	•				•
Connecticut	•					
Florida	•			•	•	
Georgia	•					
Indiana	•					
Kentucky	•	•	•			
Louisiana	•					
Maryland	•	•				
Massachusetts	•					
Michigan	•					
Minnesota	•					
Mississippi	•					
New Hampshire	•					
New Jersey	•					
New York	•	•	•	•	•	
North Carolina	•					
North Dakota	•					
Ohio	•					
Rhode Island		•				
Tennessee	•					
Texas	٠					
Utah	•					
Virginia	٠					
Wisconsin	•					
Total	25	6	3	2	2	1

Source: National Cancer Institute.<sup>17</sup>

Several resources are available to help CCC programs understand the current laws addressing skin cancer and skin cancer prevention.

• The National Cancer Institute's State Cancer Legislative Database Program provides a variety of resources on legislation related to cancer, including skin cancer and skin cancer prevention. It includes a searchable database to obtain information on skin cancer–related bills and resolutions: <u>http://www.scld-nci.net/index.cfml</u>.\*

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 The National Conference of State Legislatures provides a list of newly introduced and current legislation that addresses tanning restrictions for minors. A brief description of the restrictions is provided for each state along with links to each state statute: <u>http://www.ncsl.org/programs/health/tanningrestrictions.htm</u>\*

School Policies: In addition to legislative regulations related to sun safety, there is a variety of school policy issues that should be examined during a sun safety inventory. Many schools and/or local education agencies have established policies that impact sun safety, such as allowing hats and sunglasses to be worn at school and use of sunscreen by students. Each CCC program should have an understanding of what policies currently exist within their state/tribe/jurisdiction/territory and where school policy decisions are made (i.e., at the state, local, or school level) to inform effective implementation of sun safe policies that reduce youth exposure to UV radiation. The National Association of State Boards of Education (NASBE) maintains the State School Healthy Policy Database, which "contains brief descriptions of laws, legal codes, rules, regulations, administrative orders, mandates, standards, resolutions, and other written means of exercising authority. While authoritative binding policies are the primary focus of the database, it also includes guidance documents and other non-binding materials that provide a more detailed picture of a state's school health policies and activities"<sup>18</sup> The database can be searched using state, topic, or key word searches.

## **Lessons from the field**

- Policies that impact schools are not always enacted through legislation at the state/jurisdiction/territory level. In many cases school districts, and in some cases individual schools, determine their own policies. It may be helpful to partner with individuals who work with schools to understand what local school policies are common in your state/tribe/jurisdiction/territory.
- Sun safety policy may not always be directly related to schools. Many states have policies that prohibit people under the age of 18 from using indoor tanning facilities. When assessing your state/tribe/jurisdiction/territory sun safety policy, do not limit your search to just school policies; expand it to include more broad sun safety policies.

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## Step III: Plan and Implement Sun Safety Activities

Once you have identified partners and have a thorough understanding of the current sun safety resources and issues within your state/tribe/territory/ jurisdiction, you can move toward identification of sun safety priorities and strategies.

## **Conduct a SWOT Analysis**

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis is a valuable process for most public health planning activities. The process helps an organization to identify strengths and weaknesses within an organization, and opportunities and threats outside of the organization that can help with planning and decision making. A detailed description of SWOT analysis is available at the University of Kansas Community Tool Box (http://ctb. ku.edu/tools/en/sub section main 1049.htm\*); a brief description of the brainstorming process is provided here.

A SWOT analysis can help your CCC program explore options for new sun safety efforts and can help organize the information you have gathered through your identification of partners and sun safety inventory. The process should be conducted as a group meeting with key stakeholders and partners involved in the brainstorming process. Begin by using a table to outline your strengths, weaknesses, opportunities and threats (see **Table 3**).

Internal		External		
Strengths	Weaknesses	Opportunities	Threats	

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After giving participants an opportunity to introduce themselves, explain the objectives for the SWOT analysis and the process that will be used. The SWOT process can be done in a large group or by breaking stakeholders out into smaller groups, but the groups should not exceed 10 people. Because a significant amount of work has already gone into the sun safety inventory, it may be helpful to provide SWOT analysis participants with a summary of what has already been found so that this may inform the brainstorming activity.

Allow 20–30 minutes for the group or groups to brainstorm various strengths, weaknesses, opportunities and threats as they relate to the implementation of a sun safety effort. Examples of possible internal and external factors are included below.

#### **Internal Factors: Strengths and Weaknesses**

- **Human resources:** CCC staff, state Cancer Control Consortium members, other state government agencies involved in sun safety, state sun safety partners, local sun safety partners
- **Physical resources:** CCC program offices, existing sun safety equipment or materials, partner offices in the communities or geographic areas where you may want to conduct sun safety activities
- **Financial:** CDC funding for sun safety activities, other state funding or resources that can be directed towards sun safety, funding from other sun safety or skin cancer prevention organizations
- Activities and processes: sun safety materials or resources managed by the CCC program or sun safety partners, existing surveillance systems
- Past experiences: the reputation and networks of the CCC program and key sun safety program partners (e.g., Department of Education) that will help facilitate new sun safety efforts, previous sun safety efforts implemented

#### **External Factors: Opportunities and Threats**

- **Future trends:** in cancer control (Is sun safety a priority given other cancer control needs?) and in student and youth education and safety (How can sun safety "compete for attention" with more well funded student health issues such as obesity and tobacco use?)
- **The economy:** local, state, or national (How will the current economy impact school resources and priorities for incorporating sun safety into current curriculum and activities?)
- **Funding sources:** state and national budget priorities, funds available from sun safety or skin cancer prevention organizations

- **Legislation and policy:** What skin cancer and skin cancer prevention legislation is already in place? How supportive has the state legislature been in addressing skin cancer and skin cancer prevention? What current school-level policies facilitate or inhibit sun safety practices?
- **Partners/partnerships:** What resources do partners have access to in order to facilitate implementation of sun safety activities? What partners are not yet involved but would be helpful?

Once the brainstorming time is over, a group leader can begin to ask each group to report on what they identified for each box (strengths, weaknesses, opportunities, and threats). A recorder should capture the contributions from each group, allowing for discussion while groups share their input or holding off on discussion until after all groups have contributed their thoughts. Continue gathering information from all groups until the table is complete.

#### What Do You Do with the SWOT Results?

Once the group has completed identifying strengths, weaknesses, opportunities, and threats, the group can do several things:

- develop consensus about the most important items in each category,
- relate the findings to the group's visions, mission, and goals for implementing a sun safety initiative for schools and youth, or
- begin to translate the findings into action plans and strategies for implementing sun safety efforts.

The SWOT analysis should help your CCC program and partners to "build on your strengths, minimize your weaknesses, seize opportunities, and counteract threats."<sup>19</sup>

## **Select and Implement Sun Safety Activities**

Building on what has been learned from sun safety partners, the sun safety inventory, and the SWOT analysis, a CCC program will be ready to explore what sun safety programs and activities should be implemented. There are a wide variety of school-based sun safety efforts, curricula, and activities that CCC programs can implement to keep young people sun safe. The U.S. Preventive Services Task Force has found that educational and policy interventions within primary schools have a positive impact on sun protective "covering up" behavior to reduce UV exposure.<sup>10</sup> This includes wearing protective clothing, such as hats, shirts, or pants while outside. The evidence is limited as to the effectiveness of other skin cancer prevention interventions and activities, but there is still a great deal to be learned, so evaluation of sun safety efforts is of critical importance.



## **Lessons from the field**

- Determine what teachers and schools are currently doing to address sun safety and how it may already be included in the curriculum. Where possible, look for opportunities to integrate sun safety into existing activities, resources, and curricula. Asking a school or partner to look for ways to incorporate sun safety in their existing activities will reduce any sense of burden that may accompany a request to add an entirely new topic to an already full list of responsibilities.
- School-related policy decisions in are often made at the local level rather than statewide, so rather than push for all schools in a state to change, advocates need to work within each school district or even within each school. Addressing these issues with each school can take more time and effort than would be required for a statewide policy.
- The school year ends in the summer, which is the prime time for people to think about sun safety issues. Motivating schools to think about sun safety in the fall and winter can be difficult because the topic may not seem as relevant at that time.
- CCC staff and partners may need to "sell" the idea of sun safety to schools and other organizations that serve young people. One valuable way of doing this is to identify ways to link sun safety with higher priority issues, such as physical activity, playground safety, and athletic/sports activities.

In 2002, CDC released the *Guidelines for School Programs to Prevent Skin Cancer*, which outlines seven guidelines schools can use to reduce the risk of skin cancer among students.<sup>5</sup> These guidelines, found at <u>http://www.cdc.gov/mmwr/PDF/rr/rr5104.pdf</u>, provide resources and suggestions of how schools can work to improve sun safety practices in seven major areas:

- 1. Policy
- 2. Environmental change
- 3. Education
- 4. Family Involvement
- 5. Professional Development
- 6. Health Services
- 7. Evaluation

These guidelines serve as a natural starting point for any CCC program focusing on sun safety efforts aimed at impacting schools and young people. For those not familiar with the *Guidelines*, it is recommended that all guidelines be reviewed, and then programs select one or two to focus their efforts. When selecting guidelines to implement, it is important to work with your partners and utilize the lessons learned from the sun safety inventory and SWOT analysis to determine the strategies that are most appropriate.

In 2003, through the Skin Cancer Priority Supplement to PA03004, Improving the Health, Education, and Well-Being of Young People through Coordinated School Health Programs, three states (Colorado, Michigan, and North Carolina) were awarded funds to pilot activities to address the seven skin cancer guidelines. As a requirement of this funding, partnerships were established between each state's Department of Education and CCC program. Each state implemented activities using the guidance provided in the *Guidelines for School Programs to Prevent Skin Cancer*.<sup>5</sup> Examples of the types of activities implemented by these pilot states to address each of the seven guidelines are provided below.

When selecting activities, it is important to consider the level of intervention at which your CCC program would like to intervene. Activities can be implemented at the local level (e.g., individual schools or LEAs, museums, YMCAs) or the state/tribe/territory/jurisdiction level (e.g., state PTA, legislature). Some guidelines are more easily applied at one level or another but which guidelines and activities are selected will be largely dependent on the type of activities your CCC program is interested in implementing. Each of the three pilot states funded under the Skin Cancer Priority Supplement to PA03004 utilized mini-grants to provide schools and partner organizations with funding to implement sun safety activities. The amount of funding varied but ranged from several hundred dollars to several thousand dollars. In one state, a large amount of funding was provided to the state PTA, which then distributed it in the form of smaller mini-grants to local PTA chapters interested in sun safety. Providing a small amount of funding to schools and organizational partners served as an incentive for learning more about and implementing sun safety activities. An example of a mini-grant RFP is included as part of this toolkit.

The following are provided for each of the seven guidelines:

- a brief description of the guideline and why it is important to schoolbased skin cancer prevention efforts
- examples of program activities that have been implemented to address each of the guidelines.

The examples are largely drawn from states who implemented activities to address the *Guidelines* through a partnership between the State Department of Education and CCC program. Please note that the evidence base of proven effective sun safety interventions is very limited. These activities are provided as examples of possible activities, but your CCC program should remain up to date on new evidence of effective sun safety interventions.

In addition to the information below, this toolkit includes a list of available resources to help your state CCC program address each of the seven guidelines.

## Guideline 1: Policy – Establish Policies that Reduce Exposure to UV Radiation

### Why Is Sun Safety Policy Important?

"An effectively crafted skin cancer prevention policy provides a framework for implementing the six other guidelines. The policy demonstrates institutional commitment and guides school and community groups in planning, implementing and evaluating skin cancer prevention activities... Although a comprehensive policy is preferable, more limited policies addressing certain aspects of skin cancer prevention also can be useful" (p. 7).<sup>5</sup>

#### **Sample Activities**

#### Local:

- Offer mini-grants to schools and organizations to implement sun safety activities and require that each recipient include policy change in their efforts, in addition to any other activities.
- Provide sample sun safety policies to organizations and partners interested in implementing policies to remove the burden of developing new policies.
- Provide training and technical assistance to schools and other organizations on how to develop and implement sun safety policies. This can include training individuals who work with young people, such as teachers, school nurses, coaches, and PTA/PTSA groups.
- Disseminate resources such as *Fit, Healthy, and Ready to Learn* and CDC's *Guidelines for School Programs to Prevent Skin Cancer* to school boards and other decision making bodies. (Both of these documents are included as reference materials in this toolkit.)
- Help schools form school health teams and districts form school health councils to address health problems and promote health.



#### State/tribe/territory/jurisdiction:

- Work with state PTA partners to pass a sun safety resolution.
- Incorporate development of sun safety policy into state CCC plan.
- In states where current legislation does not exist, work with state agencies that regulate indoor tanning facilities to develop legislation to restrict tanning bed use by minors.

## Guideline 2: Environmental Change – Provide and Maintain Physical and Social Environments that Support Sun Safety

#### Why Is Environmental Change Important?

"Policies can promote the provision of supportive resources for skin cancer prevention (e.g., shade, protective clothing and hats, sunscreen at a reduced price or free, and highly visible information and prompts for sun protection) in the physical and social environment. These policies help establish routine personal behaviors and social norms that promote skin cancer prevention in the context of organized group activities" (p. 9).<sup>5</sup>

#### **Sample Activities**

#### Local:

- Conduct a shade audit using CDC's Shade Planning for America's Schools tools.
- Engage students in the research and design of shade structures that are appropriate for their school.
- Provide mini-grant funding to schools to build shade structures, plant trees, or purchase portable shade structures to be used at school events.
- Provide funding so that sunscreen can be purchased and provided to students and staff during school events (e.g., field trips, sports events, and field days). If necessary, obtain informed consent from parents so that students can use the sunscreen provided.
- Encourage school staff and students to wear sunglasses, sun safe hats, and shirts with sleeves when participating in outdoor activities.
- Produce and distribute sun safety fact sheets to parents, students, coaches, and teachers.



• Work with area parks, museums, health education centers, zoos, and community pools to provide shade structures for visitors.

#### State/tribe/territory/jurisdiction:

 Include questions on state school assessment tools to help schools identify ways to change the physical environment of their school to address sun safety. One example is the Healthy School Action Tool (HSAT) in Michigan. The SunSafe Colorado website also contains an assessment tool that can be used to assess the physical environment of schools.

## Guideline 3: Education – Provide Health Education to Teach Students the Knowledge, Attitudes, and Behavioral Skills They Need to Prevent Skin Cancer

#### Why Is Sun Safety Education Important?

"Skin cancer prevention is likely to be most effective when it is taught as part of a comprehensive health education curriculum that focuses on understanding the relations between personal behavior and health (126) and that provides students with the knowledge and skills outlined by the National Health Education Standards (112). ... In addition to health classes, skin cancer prevention can also be integrated into other subject areas. ...This type of integrated approach requires collaborative planning and curriculum development among teachers to optimize skin cancer prevention education and to ensure consistency of messages and practices" (p. 10).<sup>5</sup>

#### **Sample Activities**

#### Local:

- Host an anti-tanning pre-prom fashion show that includes educational information about the dangers of tanning.
- Develop and disseminate anti-indoor tanning press kit to student newspapers and journalists.
- Partner with summer camps and parks and recreation organizations to implement a sun safety program for youth attending day camps and to train camp staff on staying sun safe.
- Provide UV detectors to students to increase awareness of sun exposure.
- Provide schools with sun safety information and resources, such as the Sunny Days Healthy Ways curriculum or EPA's SunWise program.

#### State/tribe/territory/jurisdiction:

- Integrate sun safety into existing teaching resources, including standard course of study guidance.
- Develop new sun safety resources or utilize some of the many that are currently available, including the SunSafe Colorado website (see Resource from the field box) or sun safety lessons in the Michigan Model for Comprehensive School Health Education.

### **Resource from the field**

The SunSafe Colorado website provides a wide variety of resources and information about sun safety for schools. The website was developed by their state partner Klein Buendel, Inc., who also developed the Sunny Days Healthy Ways curriculum. Klein Buendel has offered to work with states/tribes/territories/jurisdictions interested in modifying the SunSafe Colorado website to be specific to their state. This would require a small amount of funding from your CCC program to make the necessary changes (e.g., logos, state data). If your state is interested in learning more about adapting the SunSafe Colorado website for your state/tribe/territory/jurisdiction, please contact:

> Mary Klein Buller, M.A. President, Klein Buendel, Inc. 1667 Cole Blvd., Suite 225 Golden, Colorado 80401 mbuller@kleinbuendel.com 303-565-4330 (phone) 303-565-4320 (fax) www.kleinbuendel.com

## Guideline 4: Family Involvement – Involve Family Members in Skin Cancer Prevention Efforts

## Why Is Family Involvement in Sun Safety Important?

"Involving family members in skin cancer prevention efforts increases the likelihood that they will adopt and thus model healthful sun-protection behaviors of students (122). At a minimum, parents or guardians can be informed concerning school initiatives and policies and knowledgeable regarding how their cooperation is needed to ensure child health. Parents and guardians also can be encouraged to provide children with sun-protective clothing and sunglasses for outdoor activities. In addition, parents and guardians can serve as advocates for sun-protective policies and practices in schools" (p. 11).<sup>5</sup>

## Sample Activities

#### Local:

- Develop print or electronic resources specifically for educating parents about sun safety issues.
- Partner with state and/or local PTA groups to increase awareness of sun safety through presentations and, if possible, provide funds to PTA groups for sun safety activities.
- Include sun safety policies and information in student and parent handbooks and student planners.
- Distribute informed consent forms to parents asking permission for students to use sunscreen in school or at school activities and explaining the need for sun safety awareness.
- Distribute notes to parents about the importance of sun safety prior to field trips, field days, graduation ceremonies, and other outdoor events.
- Distribute sun safety information and sunscreen at community events, festivals, and celebrations that are held outdoors.

### State/tribe/territory/jurisdiction:

- Partner with newspapers, parents' magazines, and organizational newsletters to publish and distribute articles and information on sun safety.
- Work with other state children's health organizations to identify other resources, publications, and meetings that could be used to educate families about sun safety (e.g., Cooperative Extension Children's Environmental Health Program).
- Partner with state and local media outlets to issue UV alerts.

Guideline 5: 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

Why Are Professional Development Opportunities around Sun Safety Important?

"Appropriate and effective professional development efforts should be conducted for decision makers and care givers at all levels. Professional development activities, including certification programs and inservice education, are provided routinely for teachers and other school staff (e.g., coaches and school nurses). Skin cancer prevention can be integrated into those activities. All school staff should receive basic information concerning the importance of sun safety and key strategies for skin cancer prevention" (p. 11).<sup>5</sup>

## **Sample Activities**

#### Local:

- Train school staff and administrators on sun safety policy development and skin cancer prevention.
- Train camp counselors and others who work outside with youth during the summer on how to protect themselves and the youth they work with from sun exposure.
- Identify schools in regions with the highest melanoma rates and focus trainings in those communities first.

#### State/tribe/territory/jurisdiction:

- Collaborate with state sports/athletic associations to develop and/or provide training to coaches of outdoor sports teams.
- Provide training sessions on sun safety at other training or continuing education workshops for school staff, nurses, and teachers.
## Guideline 6: Health Services – Complement and Support Skin Cancer Prevention Education and Sun Safety Environments and Policies with School Health Services

### Why Is It Important to Engage Health Services in Sun Safety?

"School health services provide an opportunity for nurses, health educators, and school health resource specialists to promote and reinforce skin cancer prevention practices. Health professionals in the community, including pediatricians, primary care providers, nurses, pharmacists, and dermatologist are credible sources of information and guidance for skin cancer prevention. They can be advocates for skin cancer prevention policies, environmental changes, and programs, and support school programs through presentations, professional training, demonstrations, and classroom visits" (p.12).<sup>5</sup>

## **Sample Activities**

### Local:

- Include school nurses in any trainings or workshops offered to teachers or other school staff.
- Provide mini-grant funding or other support to teen health centers to implement sun safety activities with teens and parents.
- Work with nurses and school administrators to discuss parental consent for sunscreen application at school.

### State/tribe/territory/jurisdiction:

• Provide sun safety resources to your state Association of School Nurses and offer to attend and present at their meetings and conferences.

## Guideline 7: Evaluation – Periodically Evaluate Whether Schools Are Implementing the Guidelines on Policies, Environmental Change, Education, Families, Professional Development, and Health Services

## Why Is Evaluation of Sun Safety Activities Important?

Evaluation questions can be used "to determine whether their programs are consistent with CDC's *Guidelines for School Programs to Prevent Skin Cancer*. These questions can be used to (1) assess whether schools in their jurisdiction care providing effective education to prevent skin cancer and (2) identify SUN SAFETY FOR AMERICA'S YOUTH TOOLKIT

schools that would benefit from additional training, resources, or technical assistance" (p. 12).<sup>5</sup>

### **Sample Activities**

#### Local:

- Collect progress reports and final reports from mini-grant recipients to track their activities and progress.
- Track and document sun safety policies implemented by schools and other community partners.
- Conduct focus groups with teachers, principals, coaches, and school nurses to identify challenges and needs regarding sun safety activities.
- Conduct pre-post training evaluations to assess training events and changes in participants' knowledge, attitudes, and skills related to sun safety.
- Train mini-grant recipients on the importance of evaluation, evaluation expectations, and how to conduct an appropriate evaluation activity.

### State/tribe/territory/jurisdiction:

- Add sun safety questions into state surveillance and data collection tools (e.g., BRFSS, YRBS).
- Identify state-specific surveillance tools that include sun safety items (e.g., NC Child Health Assessment and Monitoring Program, NC School Health Education Profiles, Michigan Healthy Schools Action Tools, Colorado Child Health Survey).

## **Step IV: Evaluate Sun Safety Efforts**

Evaluation of your CCC sun safety effort is important for understanding and measuring the impact your program has on sun safety practices within your state and ultimately changes in state melanoma incidence. Evaluation is also important as a way to track progress toward meeting the goals and objectives in your state cancer plan. Evaluation results can be used to help identify and leverage additional sources of funding for your sun safety efforts and to inform program development and future sun safety program efforts.

The evaluation strategies your CCC program utilizes will need to be tailored to the unique goals and objectives of your cancer plan and to the types of sun safety strategies implemented. Evaluation planning should be conducted on an ongoing basis and should be initiated at the beginning of the program planning process to ensure that it is well integrated into your state efforts. There is a wide variety of evaluation resources available to your program. As an introduction to evaluation, please refer to CDC's *Framework for Program Evaluation in Public Health*.<sup>20</sup> Evaluation guidance and tools for schools are available from http://www.cdc.gov/healthyyouth/evaluation/resources.htm. Several examples of local and state evaluation strategies are included under Guideline 7: Evaluation in the preceding section.

### **Lessons from the field**

- Schools have limited resources for evaluating local sun safety efforts, so be specific about what evaluation data are required and be prepared to offer evaluation support.
- Include evaluation planning in your program planning process. It is helpful develop your evaluation plan while planning your program activities rather than waiting until activities are being implemented or have been completed.

Inclusion of sun safety and skin cancer prevention questions in state surveillance tools and resources can yield important information regarding the current state of sun safety behaviors (as described in Step II under the heading Assess and Understand the Skin Cancer Burden in Your State/Tribe/Territory/ Jurisdiction). The BRFSS, YRBS, and other state surveillance systems can be utilized to assess both skin cancer burden and changes in behaviors.

Tables 4–7 present examples of questions that have been used on various national and state-based surveys to assess skin cancer risk factors and sun safety behaviors for both adults and children. Since the field of sun safety for young people is relatively new, there are more questions to assess adult sun safety behaviors than there are for young people. The YRBS has utilized several of the adult-focused questions when assessing sun safety behaviors of high school–aged young people.

Table 8 presents questions regarding school-based sun safety educationprograms, including both student education and staff development questions.These questions could be added to state or local surveillance systems as oneway to evaluate program progress.



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## Table 4. Skin Cancer Prevention/Sun Safety: Child-focused Questions

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Question	<b>Response Options</b>	Citation
On average, when your child goes outside on a sunny summer day for more than an hour, how often does he/she use sunscreen or sun block?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>21</sup>
On a sunny summer day, on average how much time does your child spend outside in the sun between 11am and 3pm?	<ul><li>ahours/minutes</li><li>b. Don't know/not sure</li></ul>	Colorado <sup>22</sup>
When your child is outside for more than 15 minutes between 11am and 3pm on a sunny summer day, how often does he/she use sunscreen with an SPF of 15 or higher?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>22</sup> North Carolina 2005 <sup>23</sup>
On a sunny summer day, when your child is outside for more than 15 minutes between 11am and 3pm, how often does he/she stay in the shade?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>22</sup> North Carolina 2005 <sup>23</sup>
On a sunny summer day, when your child is outside for more than 15 minutes between 11am and 3pm, how often does he/she wear clothes covering most of his/ her arms and legs?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>22</sup> North Carolina <sup>23</sup>
Thinking back over the past 12 months, tell me as best you can whether your child has had any sunburns during that time. By sunburn, I mean any reddening or burn of the skin that lasts until the next day.	a. Yes b. No c. Don't know/not sure	Colorado <sup>22</sup> North Carolina <sup>23</sup>
Do you think a tan makes a child look healthy?	a. Yes b. No c. Don't know/not sure	Colorado <sup>22</sup>

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Question	<b>Response Options</b>	Citation
When you go outside on a sunny summer day for more than an hour, how often do you use sunscreen or sun block?	<ul><li>a. Always</li><li>b. Nearly always</li><li>c. Sometimes</li><li>d. Seldom</li><li>e. Never</li></ul>	Honey <sup>24</sup> Colorado <sup>25, 26</sup> Kansas <sup>27</sup>
What is the SPF of the sunscreen you use most often?	aNumber b. Don't know/not sure	Colorado <sup>25, 26</sup>
When you go outside on a sunny summer day for more than an hour, how often do you stay in the shade?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>25, 26</sup> Kansas <sup>27</sup>
When you go outside on a sunny day for more than an hour, how often do you wear a wide- brimmed hat or any other hat that shades your face, ears, and neck from the sun?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Honey <sup>24</sup> Colorado <sup>25, 26</sup> Kansas <sup>27</sup>
When you go outside on a sunny summer day for more than an hour, how often do you wear long-sleeved shirts?	a. Always b. Nearly always c. Sometimes d. Seldom e. Never	Colorado <sup>25, 26</sup> Kansas <sup>27</sup>
When you are tanning, either outside or on an indoor tanning bed, what products do you usually apply to your skin?	<ul> <li>a. Tan enhancer</li> <li>b. Sunscreen with SPF less than 15</li> <li>c. Sunscreen with SPF 15 or higher</li> <li>d. I do not use any skin products</li> <li>e. I do not purposely tan in direct sunlight or use a tanning bed</li> <li>f. Other</li> </ul>	Florida <sup>28</sup>
When you are outside in direct sunlight for the purpose of tanning, do you reapply sunscreen?	<ul> <li>a. Yes</li> <li>b. No</li> <li>c. I do not purposely tan in direct sunlight</li> <li>d. Don't know/not sure</li> </ul>	Florida <sup>28</sup>
Have you used a tanning bed or sun lamp in the last 12 months?	a. Yes b. No	Kansas <sup>27</sup>

## Table 5. Skin Cancer Prevention/Sun Safety: Adult-focused Questions

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# Table 5. Skin Cancer Prevention/Sun Safety: Adult-focused Questions (continued)

Question	Response Options	Citation
Has a doctor, nurse, or other health professional ever spoken with you about taking protective measures against skin cancer? Protective measures include use of sunscreen, protective clothing, and avoiding exposure to sunlamps or tanning beds.	<ul> <li>a. Yes, within the past year (any time less than 12 months ago)</li> <li>b. Yes, within the past 2 years (1 year but less than 2 years ago)</li> <li>c. Yes, within the past 3 years (2 years but less than 3 years ago)</li> <li>d. Yes, within the past 5 years (2 years but less than 5 years ago)</li> <li>e. Yes, 5 or more years ago</li> <li>f. No</li> </ul>	Kansas <sup>29</sup>
Including any time that even a small part of your skin was red for more than 12 hours, have you had a sunburn within the past 12 months?	a. Yes b. No	Kansas <sup>30</sup>
Including times when even a small part of your skin was red for more than 12 hours, how many sunburns have you had within the past 12 months?	a. One b. Two c. Three d. Four e. Five f. Six or more	Kansas <sup>30</sup>

### Table 6. Skin Cancer Risk Factors: Adult-focused Questions

Question	<b>Response Options</b>	Citations
Have you had a sunburn within the past 12 months?	a. Yes b. No c. Don't know/not sure	Honey <sup>24</sup> Colorado <sup>25, 26</sup> Florida <sup>31</sup>
Including times when even a small part of your skin was red for more than 12 hours, how many sunburns have you had within the past 12 months?	a. One b. Two c. Three d. Four e. Five f. Six or more g. Don't know/not sure	Colorado <sup>25, 26</sup> Florida <sup>31</sup>

### Table 7. Sun Safety Perception: Adult-focused Question

Question	<b>Response Options</b>	Citation
Suppose that after several months of not being out in the sun, you went out in the sun without a hat, sunscreen, or protective clothing for an hour. Would you sunburn, darken without sunburn, or not have anything happen?	a. Sunburn b. Darken without sunburn c. Not have anything happen	Honey <sup>24</sup>

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In addition to questions that address behaviors related to sun safety and perception of risks related to sun exposure, some state and national surveys have included questions that address issues related to program implementation. These questions assess support for sun safety, existing sun safe policies, sun safety education, and staff training around sun safety. A list of these questions is included in **Table 8**. By including these items on a state survey of teachers or administrators, a CCC program can establish a baseline for sun safety activities within the school and then track improvement over time.

Question	<b>Response Options</b>	Citation
Now I am going to read a list of health topics. For each one, please tell me if you support school children receiving age-appropriate education about it in school.	<ul> <li>a. Dental and oral health</li> <li>b. Nutrition and dietary behavior</li> <li>c. Human sexuality</li> <li>d. Sexually transmitted disease prevention</li> <li>e. Emotional and mental health</li> <li>f. Suicide prevention</li> <li>g. Tobacco use prevention</li> <li>h. Alcohol and other drug use prevention</li> <li>i. Violence prevention</li> <li>j. Sun safety</li> </ul>	Colorado <sup>22</sup>
Does your school have a policy establishing sun safety guidelines for any of the following areas?	<ul> <li>a. Encourage or allow students to apply lip balm and/or sunscreen</li> <li>b. New construction/renovation projects include a plan for shade areas</li> <li>c. Promote or require the use of protective clothing outside (e.g., hats, sunglasses)</li> <li>d. Sun safety staff development opportunities for teachers</li> <li>e. Sun safety education for students</li> <li>f. Other areas</li> </ul>	North Carolina <sup>32</sup>

#### Table 8. School-based Education/Program Implementation

(continued)



## Table 8. School-based Education/Program Implementation (continued)

Question		Response Options	Citation
During this school year, have teachers in this school tried to increase student knowledge on each of the following topics in a required health education course in any of grades 6 through 12?	a. Yes b. No	(	DC <sup>33</sup>
- Sun safety or skin cancer prevention			
During this school year, did teachers in this school teach each of the following physical activity topics in a required health education course for students in any of grades 6 through 12?	a. Yes b. No	C	DC <sup>33</sup>
- Weather-related safety (e.g., avoiding heat stroke, hypothermia, and sunburn while physically active)			
During the past 2 years, did you receive staff development (such as workshops, conferences, continuing education, or any other kind of inservice) on each of the following health education topics?	a. Yes b. No	C	DC <sup>33</sup>
- Sun safety or skin cancer prevention			
Would you like to receive staff development on each of these health education topics?	a. Yes b. No	C	:DC <sup>33</sup>
- Sun safety or skin cancer prevention			



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Protecting young people from UV exposure and teaching them how to practice lifelong sun safety behaviors is critical to reducing the rates of skin cancer in our country. As we have demonstrated, there is an abundance of informational material available to support programs and schools interested in engaging in sun safety activities. This toolkit brings together many of these resources into one package so that your program may develop and select sun safety strategies to address the needs of your state and program.



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