



SUN SAFETY FOR STUDENTS IN SCHOOLS

Maryland State School Health Services Guidelines

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FOREWORD

There is a strong relationship between academic achievement and a child's physical, emotional and mental health. This link is the foundation for providing school health services as an important component of a school program. School health services provide primary prevention aimed at keeping students in schools through appropriate screenings; early identification of children at risk for physical, emotional and mental health concerns; and case management of students with chronic health concerns.

The Maryland Code Annotated, Education § 7-401 (Md. Code Ann., Educ. § 7-401) requires the Maryland State Department of Education (MSDE) and the Maryland Department of Health (MDH) to jointly develop public standards and guidelines for school health programs. The following guideline was developed in accordance with that requirement and is based on the expressed needs of the local school health services programs. The guidelines developed under Md. Code Ann., Educ. § 7-401 contain recommendations for minimum standards of care and current best practices for the health service topics addressed. It is intended that these guidelines will be used by the local education agencies (LEAs) in developing policies and procedures to assist local school health services programs in providing consistent and safe care to the students of Maryland. Specific laws and regulations that direct school nursing practice or other health services are identified in the guidelines.

To implement these guidelines, LEAs and local health departments should consult with MSDE and MDH who will:

- Assist and provide technical assistance to local school health programs to support their efforts to plan for students with special health needs;
- Provide training to all appropriate school staff regarding issues related to students with special health needs including, but not limited to, planning, maintaining a safe environment, and medication administration issues; and
- Monitor the implementation of school health services programs including, but not limited to, programs and policies related to students with special health needs.

SECTION I: BACKGROUND

INTRODUCTION

Sunlight is a vital source of energy for all life on earth. It provides several health benefits including warmth, light and vitamin D. Vitamin D is produced by exposure to ultraviolet (UV) radiation and plays a crucial role in skeletal development, immune function, and blood cell formation. However, exposure to UV radiation, both ultraviolet A (UVA) and ultraviolet B (UVB), can also have very harmful effects on the body. Short term overexposure can cause sunburn, pain and in severe cases, blistering of the skin. Long term exposure can cause an acceleration in skin aging and lead to skin cancer. Overexposure to UV radiation can increase the risk of cataracts and other eye conditions that impact sight. Overexposure can also suppress immune function which may compromise the body's ability to resist diseases.

Skin cancer is the most common and most preventable form of cancer. Student exposure to UV radiation can be reduced by the proper use of sunscreen and sun safety practices. Children are particularly at risk, as sun exposure during childhood and adolescence appears to set the stage for the development of melanoma and non-melanoma skin cancers later in life. Sun safety practices that begin early in life and are consistently followed may help prevent skin cancers. School nurses can help promote positive health practices, and schools are an excellent place to teach healthy behaviors that can prevent overexposure to UV radiation for the following reasons:

- Children spend much time in school, and UV radiation exposure during the school years contributes significantly to total lifetime sun exposure.
- Schools provide an environment that is geared towards learning and practicing new skills, including sun safety behaviors.
- Teachers play a major role in influencing children's knowledge, attitudes, and behavior regarding sun protection, and can make a major contribution to the long-term health of their students.

PURPOSE

The purpose of these guidelines is to provide school nurses with information and direction for promoting sun safety practices among students and staff in the school environment and to provide prevention strategies for schools to change children's knowledge, attitudes, and behaviors regarding sun protection.

MARYLAND STATUTE

The Md. Code Ann., Educ. §7-442, *Student Sunscreen Use*, was enacted in 2018. This law defines sunscreen as a topical sunscreen product that is: 1) used to prevent the effects of overexposure to the sun and not for medical treatment of an injury or illness; and 2) approved by the federal Food and Drug Administration for over-the-counter use. The law mandates that: 1) each county board shall adopt a written policy authorizing a student to possess and use sunscreen on school property or at a school-sponsored activity without written permission from a health care provider; and 2) each county board shall encourage public schools to educate students about sunscreen, sun safety, and the written sunscreen policy.

SUN SAFETY FACTS

- Sun rays are strongest between 10 a.m. and 4 p.m.

- Sun rays can reflect off surfaces such as buildings, water, snow, sand, and sidewalks.
- The UV index provides a forecast of the expected risk of overexposure to UV radiation from the sun. The US Environmental Protection Agency (EPA) provides information on the UV Index Scale. A UV Index reading of:
 - 0 to 2: Low
 - No protection needed. You can safely stay outside using minimal sun protection.
 - 3 to 7: Moderate to High
 - Protection needed. Seek shade during late morning through mid-afternoon. When outside, generously apply broad-spectrum SPF-15 or higher sunscreen on exposed skin, and wear protective clothing, a wide-brimmed hat, and sunglasses.
 - 8+: Very High to Extreme
 - Extra protection needed. Be careful outside, especially during late morning through mid-afternoon. If your shadow is shorter than you, seek shade and wear protective clothing, a wide-brimmed hat, and sunglasses, and generously apply a minimum of SPF-15, broad-spectrum sunscreen on exposed skin.
 - The Shadow Rule
 - An easy way to tell how much UV exposure you are getting is to look for your shadow:
 - If your shadow is taller than you are (in the early morning and late afternoon), your UV exposure is likely to be lower.
 - If your shadow is shorter than you are (around midday), you are being exposed to higher levels of UV radiation. Seek shade and protect your skin and eyes.

SUN SAFETY RECOMMENDATIONS

Be “SunWise”- Campaign and sun safety actions recommended by EPA:

- Avoid sunburns- Sunburns significantly increase one’s lifetime risk of developing skin cancer.
- Generously apply sunscreen: about one ounce to cover all exposed skin 20 minutes before going outside. Sunscreen should have a Sun Protection Factor (SPF) of at least 15+ and provide protection from both UVA and UVB rays (Broad Spectrum). Reapply every two hours, even on cloudy days, and after swimming or sweating.
- Seek shade when possible, especially when the sun’s UV rays are strongest between 10 a.m. and 4 p.m.
- Wear clothing, including long sleeved shirts and long pants, that provide protection from UV rays. Some manufacturers include information on the clothing UV protection factor. Light colors may absorb less UV rays than darker colors.
- Wide-brimmed hats can reduce UV exposure to the face, head, ears, and neck. Tightly woven fabrics may offer more protection from UV rays than hats that are loosely woven.
- Sunglasses may provide protection from both UVA and UVB rays.

- Use extra caution near water, snow, and sand because they reflect the damaging rays of the sun, which can increase your chance of sunburn.
- Maintain appropriate hydration (e.g., before, during, and after physical activity).
- Note expiration dates stamped on sunscreen containers.

SECTION II: SUN SAFETY AND THE SCHOOL ENVIRONMENT

School nurses, school administrators, school staff, parents/guardians, students, and community partners may initiate a school-wide assessment of current sun safety practices. This assessment may include information on shade, sunscreen, clothing, hats, sunglasses, and the UV index for use when outdoors for physical education classes, recess, field trips, sports, field days, and other school-sponsored events.

Once an assessment of existing sun safety practices is completed, specific recommendations can be determined and should include reviewing the LEA's policy regarding the use of sunscreen by students and sun safety practices.

ROLE OF THE SCHOOL NURSE

School nurses may enhance the wellness of school staff and students in the following ways:

- Advocate for and promote sun safety practices with students and school staff;
- Assist with school assessment of sun safety practices;
- Encourage skin checks and medical follow-up for concerns or questions;
- Collaborate with community partners to promote sun safety practices throughout the school year;
- Design procedures that detail specific sun safety practices for school sponsored events when long sun exposure times are anticipated;
- Display information on sun safety practices on bulletin boards and in the health suite;
- Promote student use of sunscreen prior to and during outdoor activities;
- Include articles regarding sun safety practices in the school newsletter and on the school website;
- Model sun safety practices;
- Present sun safety information to parent/teacher associations and organizations;
- Provide individual health counseling to students and school staff on sun safety practices if needed;
- Educate students and school staff on the risks associated with the use of tanning beds;
- Support classroom instruction and activities with resources on sun safety practices; and
- Provide health messages on sun safety practices for morning and afternoon announcements.

PARENTAL/GUARDIAN RESPONSIBILITIES

- Inform the school nurse or other school health services staff if the student has any health condition(s) which may be impacted by sun exposure;
- Educate the student on the proper application of sunscreen;
- Provide appropriate Food and Drug Administration (FDA) approved sunscreen for the student; and

- Dress the student appropriately for outdoor activities (e.g., long-sleeved, light-colored clothing, hats, sunglasses).

STUDENT RESPONSIBILITIES

- Do not share sunscreen with other students;
- Apply sunscreen as instructed; and
- Dress appropriately for outdoor activities (e.g., long-sleeved, light-colored clothing, hats, sunglasses).

SCHOOL ADMINISTRATOR RESPONSIBILITIES

- Encourage the education of students, parents/guardians, and school staff on the use of sunscreen and sun safety practices; and
- Ensure the LEA's policy authorizing a student to possess and use FDA approved sunscreen on school property or at a school-sponsored activity without written permission from a healthcare provider has been shared with students, parents/guardians, and school staff.

SECTION III: DEFINITIONS

DEFINITIONS

Broad Spectrum Sunscreen: This term describes a sunscreen that protects against both UVA and UVB rays.

Cataract: A cataract is a clouding of the eye's lens and is the leading cause of blindness worldwide, and the leading cause of vision loss in the United States. Excessive exposure to sunlight is one of the risk factors for the development of cataracts.

Melanoma: Melanoma is one of the most common cancers in people younger than 30 years of age. Increased risk depends on several factors including ultraviolet light sun exposure, number and type of moles on the skin, skin type, and family history (genetics). Malignant melanoma is the most serious type of skin cancer. Some cancers are highly curable with early detection and treatment.

Skin Cancer: Skin cancer is the out-of-control growth of abnormal skin cells. It is the most common cancer in the United States. The main types of skin cancer are basal cell carcinoma, squamous cell carcinoma, and malignant melanoma.

Sunburn: Sunburn is a red, painful skin reaction after exposure to ultraviolet (UV) light. Exposure to the sun during daily activities and play can contribute to sun damage.

Ultraviolet (UV) Radiation: Ultraviolet (UV) radiation is part of the electromagnetic (light) spectrum that reaches the earth from the sun. It has wavelengths shorter than visible light, making it invisible to the naked eye. Ultraviolet A (UVA) is the longer wave UV ray that causes lasting skin damage, skin aging, and can cause skin cancer. Ultraviolet B (UVB) is the shorter wave UV ray that causes sunburns, skin damage, and can also cause skin cancer.

SECTION IV: RESOURCES AND REFERENCES

RESOURCES

American Academy of Dermatology: <https://www.aad.org>

The goals of this organization include excellence in dermatologic care through education and advocacy, access to dermatologic care, and data driven transformation of care.

- Sun Protection: <https://www.aad.org/public/everyday-care/sun-protection>

Centers for Disease Control and Prevention (CDC): www.cdc.gov

The CDC serves as the national agency for developing and applying disease prevention and control, environmental health and health promotion, and educational activities to improve the health of the people of the United States.

- Guidelines for School Programs to Prevent Skin Cancer: https://www.cdc.gov/cancer/skin/what_cdc_is_doing/guidelines.htm
- Sun Safety – How to Protect Your Skin From the Sun: https://www.cdc.gov/cancer/skin/basic_info/sun-safety.htm

National Council on Skin Cancer Prevention: <https://www.skincancerprevention.org>

The mission of the National Council on Skin Cancer Prevention is to prevent skin cancer through education, advocacy, and raising awareness.

- Resources: Teachers and Schools <https://www.skincancerprevention.org/resources/teachers-and-schools>

National Environmental Education Foundation: <https://www.neefusa.org>

NEEF is a nonprofit organization chartered to complement the work of the US Environmental Protection Agency (EPA) working to make the environment more accessible, relatable, relevant, and connected to people's daily lives.

- SunWise Environmental and Health Education Program: <https://www.neefusa.org/sunwise>

United States Environmental Protection Agency: <https://www.epa.gov>

EPA provides information on the environmental hazards that can threaten our health in our everyday lives.

- Sun Safety: <https://www.epa.gov/sunsafety>
- UV Index Scale <https://www.epa.gov/sunsafety/uv-index-scale-0>

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