

Prevention of Skin Cancer due to Ultraviolet Ray Exposure - The Role of the School Nurse



*National
Association of
School Nurses*

Position Statement

SUMMARY

It is the position of the National Association of School Nurses (NASN) that the registered professional school nurse (hereinafter referred to as school nurse) is an essential member of the school health team when addressing the issue of student exposure to ultraviolet (UV) rays. The school nurse is in a key position to empower students to make informed choices regarding health-related behaviors (Banfield, McGorm, & Sargent, 2015) and to provide sun protection education to students, families, and school staff.

BACKGROUND

Overexposure to the sun's UV rays or to artificial sources like tanning beds can cause harmful effects to the body (Centers for Disease Control and Prevention [CDC], 2017). The most common harmful effect is skin cancer. Skin cancer, a preventable cancer, is the most common type of cancer in the United States; more than five million annual cases of skin cancer can be prevented by skin protection and avoidance of tanning beds (American Cancer Society, 2017). Each year in the United States, the cost of treating skin cancer exceeds \$8.1 billion (United States Department of Health & Human Services [USDHHS], 2014). Sun exposure is the leading cause of melanoma skin cancer (Kleier, Hanlon, & MacDougall, 2017). Pediatric melanoma, the most serious form of skin cancer, increased by 2% each year between 1973 and 2009 (Kleier et al., 2017; Wong, Harris, Rodriguez-Galindo, & Johnson, 2013).

Approximately 25% of UV exposure occurs during childhood and adolescence because of increased opportunities for exposure. Exposure to UV radiation during childhood plays a very important role in the future development of skin cancer, especially melanoma and basal cell cancer (Kleier et al., 2017). People who have a history of one blistering sunburn during childhood have double the risk of developing melanoma later in life compared to those who did not have such exposures (Kleier et al., 2017).

Sunscreen is considered an over-the-counter medication by the Food and Drug Administration (U.S. Food and Drug Administration, 2017). FDA recommends sunscreen products to be used as directed by the Drug Facts label. NASN recommends that school nurses provide their professional expertise in assisting school boards or other governing bodies in writing medication administration policies and procedures that focus on safe, efficient medication administration to all students in accordance with each state's nurse practice act (NASN, 2017). Currently seven states have laws that allow students' use of sunscreen at school without a physician's order, and six additional states have pending legislation (Farquhar, 2017). It is important for school nurses and other school staff to be aware of pending legislation as each state's requirements are different, and not all legislation addresses school district or school employees' liability (Moore, 2017).

Tanning beds, unlike sun exposure, provide concentrated UV exposure despite location, or time of day, causing further risks of skin cancer (USDHHS, 2014). According to the National Conference of State Legislatures, 14 states and the District of Columbia currently ban the use of tanning beds by minors, and 42 states and the District of Columbia regulate use of tanning beds by minors (Moore, 2017).

RATIONALE

School nurses are in an ideal position to promote, model and educate students, staff and families about the need for conscientious UV ray protection. Children and adolescents spend most of their waking hours during the week at school. Some of that time is spent in outdoor activities, usually during the time of day when sun exposure is most

damaging (Guy, Holman, & Watson, 2016). Early education about the dangers of sun and the protection of oneself is critical. Sunburn can be prevented, and preventative measures should become part of a daily self-care practice. The CDC's Skin Cancer Prevention Progress Report (2017a) highlights several education programs that school nurses can access to teach students about the effects of UV radiation, the types of skin cancers it can cause, and the importance of protecting themselves from too much UV exposure.

School-based health education to promote skin cancer prevention is most effective when it is provided consistently and introduced sequentially in every grade from preschool through twelfth grade. School nurses are in the position to support preventive exposure to UV rays by providing students, families and policy makers with information on the following:

- wearing of sunglasses, hats, and protective clothing
- avoiding outdoor play during peak sun intensity hours when UV ray exposure is greatest
- playing in shaded areas (whether by natural or installed shading devices)
- using sunscreen properly and consistently (CDC, 2017b; American Academy of Pediatrics [AAP], 2017)
- avoiding sun tanning and tanning beds (AAP, 2011)

The AAP (2017) and CDC (2017b) both recommend that a broad-spectrum sunscreen be at a minimum sun protective factor (SPF) of 15 or higher and be applied before going outside (even on cloudy days) and every two hours, especially after swimming or sweating.

As a member of the school health team, the school nurse is in a position to influence policy development to help limit exposure to UV rays. School nurses need to be aware of state legislative efforts to minimize childhood exposure to UV rays, related both to application of sunscreen and banning of tanning beds by minors. School nurses need to work with legislators and other stakeholders to help them understand nurse practice acts and requirements for safe and efficient medication administration in a school setting.

CONCLUSION

Skin cancer can be prevented through education and proper protection. School nurses are in a position to provide education to students, school staff, community members, and policy makers that can help reduce student exposure to harmful UV rays whether it be through sun exposure or artificial sources (tanning beds). School nurses should advocate for preventative measures, such as use of sunscreen (according to district policy and state nurse practice act); use of protective clothing, wide brim hats, and sunglasses; the installation of shading devices for play areas; and laws that reduce UV ray exposure from artificial sources.

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