

RESEARCH LETTER

Sun Protection Policies in Juvenile Detention Centers in Pennsylvania

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The incidence rate of skin cancer is increasing in the United States and deaths from melanoma have been increasing dramatically. Childhood sunburns is an important risk factor for melanoma, and may increase risk by nearly 2-fold.¹ More than half of a person's lifetime UV exposure typically occurs during childhood and adolescence.² Effective sun protection is practiced by less than one-third of U.S. youth.² Therefore, primary prevention and early detection of skin cancer in childhood is important to reduce the risk of developing skin cancer.³

The Centers for Disease Control and Prevention (CDC) developed a set of guidelines to provide schools with a comprehensive approach to preventing skin cancer among adolescents and young people.⁴ However, these guidelines are not specifically aimed at similar school-aged children who are in different environments but also have similar sun exposure. The objective of this study was to determine the prevalence of sun protection policies, environmental features, and attitudes in institutions responsible for school-aged populations in juvenile detention centers.

The survey was designed to measure all seven components of the CDC guidelines: policy; environmental change; education; family involvement; professional development; health services; and evaluation. Juvenile detention centers were included if they are classified as secure detention centers, secure confinement centers, or non-secure residential programs.

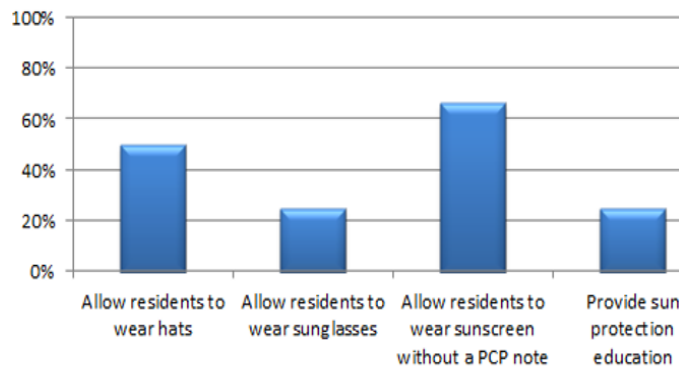
A 26-item survey queried current sun protection policies, amount of time residents spent outside during peak sun hours, the use of sunscreen and sun-protective clothing by residents and staff, and attitudes about the importance of sun protection. The survey was piloted through the County Commissioners to determine readability and face validity of the instrument and sent via e-mail to all juvenile detention centers in Pennsylvania (n=19). Data was collected between 05/18/2018 and 06/08/2018 and centers were sent 2 reminders by e-mail.

Data analysis was conducted using SPSS 22 and data were analyzed primarily by calculating percentages. For questions using a 5-point Likert scale, respondents who endorsed an item with a 4 or 5 were coded as agreeing with the statement.

Overall, 63.2% (n=12) of the juvenile detention centers in Pennsylvania responded to the survey. 41.7% (n=5) of the centers were secure detention centers, 25% (n=3) secure confinement centers, and 33.3% (n=4) non-secure residential programs. Two facilities (16.7%) reported having written policy that governs resident UV protection. All of the facilities (100%) responded with sometimes or always scheduling activities during peak sun hours.

Facilities were asked about shade producing structures and permission to wear hats, sunglasses, and sunscreen without a provider's note as options to govern resident UV protection. All the facilities (100%) reported shade-producing structures, but 83.3% (n=10) cover less than 25% of the outdoor activity areas. Of the 12 centers, 50% (n=6) allow residents to wear hats, 25% (n=3) allow residents to wear sunglasses, 66.7% (n=8) allow residents to wear sunscreen without a PCP note, and 25% (n=3) provide sun protection education (Figure 1). Only 1 facility utilized none of the 4 options (shade producing structures, hats, sunglasses, and sunscreen). 6 facilities (50%) utilized 1 of the options, 1 facility (8.3%) utilized 2 of the options, 3 facilities (25%) utilized 3 of the options, and 1 facility (8.3%) utilized all 4 of the options. (Shade producing structures was counted as yes if it

Figure 1: Percent of facilities that allow residents to use different sun protection options.



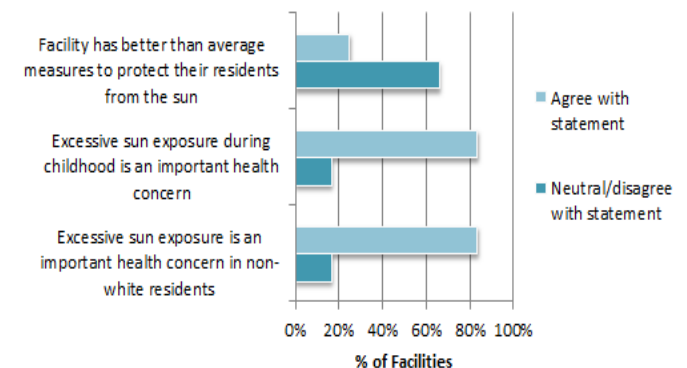
covered more than 25% of the outdoor activity areas). Allowing residents to wear sunscreen without a provider's note was the method most often utilized.

Five facilities (41.7%) reported having staff trained or knowledgeable about sun protection behaviors. Facilities with trained staff reported higher rates of instructing residents about practicing sun protection behaviors. The facilities that did not have staff trained or knowledgeable about sun protection behaviors reported never or less often instructing residents about sun protection.

Most (66.7%, n=8) of the centers agreed that excessive sun exposure during childhood is an important health concern, but only 25% (n=3) agree that their facility has adequate measures to protect their residents from the sun (Figure 2). Only 08.3% (n=1) of respondents have seen the CDC school guidelines.

The CDC's guidelines include recommendations for schools to encourage skin cancer prevention on school property and elsewhere. However, these guidelines are not equally implemented across all the institutions responsible for school-aged populations, such as children in juvenile detention centers. Thus, we may be missing

Figure 2: Facility attitudes towards sun exposure.



an important educational opportunity in an already vulnerable community.

In the school setting, a study by Correnti et al showed inadequate youth sun-protective behavior (eg, sunscreen use) despite rising skin cancer rates in children.⁶ Pollitt et al further explored sun-protective behavior specifically in low socioeconomic (SES) status population. The study focused on the association of low socioeconomic status with more advanced melanoma at diagnosis and decreased survival.⁷ The authors identified that the association is due to decreased knowledge about the risk of melanoma and associated risk factors among low-SES individuals. They suggest the need to increase education about skin cancer among lower-SES patients and increase awareness of socioeconomic disparities in clinical communication and care.⁷

Limitations of our study include the small number of centers in PA that qualified for participation in the survey. Next steps include expanding the survey to more states and comparing sun protection practices of centers in different UV intensity regions.

Among public juvenile detention centers in PA, we found an absence of policies to reduce sun exposure and a lack of knowledge about the CDC guidelines to prevent skin cancer. Despite these results, administrators are largely in favor of stronger policies and believe sun exposure is an important health issue.

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