Training Lifeguards to Assist in Skin Cancer Prevention

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Lifeguards play a crucial role in ensuring water safety, but they also are uniquely positioned to promote skin cancer prevention and proper sunscreen use.[1,2] There are several benefits and challenges to offering skin cancer prevention training for lifeguards.[3] We examine the advantages of training, highlight the role lifeguards can play in larger public skin cancer prevention efforts, and address practical techniques for developing lifeguard-focused skin cancer education programs. By providing this knowledge to lifeguards, we can improve community health outcomes and encourage sun-safe behaviors in high-risk outdoor locations.

Benefits of Skin Cancer Prevention Training for Lifeguards

Research has shown that lifeguards are at an elevated risk for basal cell carcinoma, squamous cell carcinoma, and melanoma due to frequent prolonged occupational sun exposure.[1,2,4-6] Therefore, comprehensive education on skin cancer prevention—including instruction on proper sunscreen application techniques and the importance of regular reapplication as well as how to recognize suspicious skin lesions—should be incorporated into lifeguard certification programs. One study evaluating the effectiveness of a skin cancer prevention program for lifeguards found that many of the participants lacked a thorough understanding of the different types of skin cancer.[5] Another study found that lifeguards at pools in areas where societal norms supporting sun safety are stronger exhibited noticeably more sun protection practices, with regression estimates of 0.22 (95% CI, 0.17-0.26).[7] Empowering lifeguards with valuable health knowledge during their regular training could potentially reduce their risk for skin cancer,[4] as they may be more inclined to use sunscreen appropriately and reach out to a dermatologist for regular skin checks and evaluation of suspicious lesions.

Role of Lifeguards in Public Skin Cancer Prevention Efforts

Once trained on skin cancer prevention, lifeguards also can play a pivotal role in promoting sunscreen use among the public. Despite the widespread availability of high-quality sunscreens, many swimmers and beachgoers neglect to regularly apply or reapply sunscreen, especially on commonly exposed areas such as the back, shoulders, and face.[8] Educating lifeguards on skin cancer prevention could enhance health outcomes by increasing early detection rates and promoting sun-safe behaviors among the general public.[9] However, additional training requirements might increase the cost and time commitment for lifeguard certification, potentially leading to staffing shortages.[3,7] There also is a risk of lifeguards overstepping their role and providing inaccurate medical advice, which could cause distress or even lead to liability issues.[7] Balancing these factors will be crucial in developing effective and sustainable skin cancer prevention programs for lifeguards.

Implementing Lifeguard Skin Cancer Training

Implementing skin cancer prevention training programs for lifeguards requires strategic collaboration between dermatologists, and lifeguard training organizations to ensure that the participants receive consistent and comprehensive training.[10] Additionally, public health campaigns can support these efforts by raising awareness about the importance of sun safety and regular skin checks.[6] Tailored training modules/materials, ongoing technical assistance, and active,

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The authors have no relevant financial disclosures to report.

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Cutis. 2025 May;115(5):139, 145. doi:10.12788/cutis.1213

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multicomponent approaches that account for both individual and environmental factors can increase program implementation in a variety of community settings.

Final Thoughts

Through effective education, lifeguards can potentially have a substantial impact on skin cancer prevention, both among lifeguards themselves and the general public. By promoting proper sunscreen use, lifeguards can help reduce the incidence and mortality associated with skin cancers. Future studies should focus on developing and implementing targeted education initiatives for lifeguards, fostering collaboration between relevant stakeholders, and raising public awareness about the importance of sun safety and early skin cancer detection. These efforts ultimately could lead to improved public health outcomes and reduced skin cancer rates, particularly in high-risk populations that frequently are exposed to UV radiation.

REFERENCES

1. Enos CW, Rey S, Slocum J, et al. Sun-protection behaviors among active members of the United States Lifesaving Association. *J Clin Aesthet Dermatol*. 2021;14:14-20.
2. Verma K, Lewis DJ, Siddiqui FS, et al. Mohs micrographic surgery management of melanoma and melanoma in situ. *StatPearls*. Updated August 28, 2024. Accessed April 15, 2025. https://www.ncbi.nlm.nih.gov/books/NBK606123/
3. Verma KK, Joshi TP, Lewis DJ, et al. Nail technicians as partners in early melanoma detection: bridging the knowledge gap. *Arch Dermatol Res*. 2024;316:586. doi:10.1007/s00403-024-03342-0
4. Geller AC, Glanz K, Shigaki D, et al. Impact of skin cancer prevention on outdoor aquatics staff: the Pool Cool program in Hawaii and Massachusetts. *Prev Med*. 2001;33:155-161. doi:10.1006/pmed.2001.0870
5. Hiemstra M, Glanz K, Nehl E. Changes in sunburn and tanning attitudes among lifeguards over a summer season. *J Am Acad Dermatol*. 2012;66:430-437. doi:10.1016/j.jaad.2010.11.050
6. Verma KK, Ahmad N, Friedmann DP, et al. Melanoma in tattooed skin: diagnostic challenges and the potential for tattoo artists in early detection. *Arch Dermatol Res*. 2024;316:690. doi:10.1007/s00403-024-03415-0
7. Hall DM, McCarty F, Elliott T, et al. Lifeguards' sun protection habits and sunburns: association with sun-safe environments and skin cancer prevention program participation. *Arch Dermatol*. 2009;145:139-144. doi:10.1001/archdermatol.2008.553
8. Emmons KM, Geller AC, Puleo E, et al. Skin cancer education and early detection at the beach: a randomized trial of dermatologist examination and biometric feedback. *J Am Acad Dermatol*. 2011;64:282-289. doi:10.1016/j.jaad.2010.01.040
9. Rabin BA, Nehl E, Elliott T, et al. Individual and setting level predictors of the implementation of a skin cancer prevention program: a multilevel analysis. *Implement Sci*. 2010;5:40. doi:10.1186/1748-5908-5-40
10. Walkosz BJ, Buller D, Buller M, et al. Sun safe workplaces: effect of an occupational skin cancer prevention program on employee sun safety practices. *J Occup Environ Med*. 2018;60:900-997. doi:10.1097/JOM.0000000000001427