

Sunburns and Skin Cancer: How Childhood Sunburns Impact Lifetime Risk

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Sun exposure can have a significant impact on a person's overall risk of cancer. Children are particularly vulnerable, and increased exposure during childhood can significantly raise the risk of skin cancers in adulthood.

Exposure to sunlight can lead to excessive penetration and absorption of ultraviolet radiation, more commonly known as UV radiation. As UV rays penetrate the skin, they damage the DNA within skin cells, leading to pain, redness, swelling, and inflammation. This damage may accumulate over time. Severe sunburns, especially during childhood, can set the stage for abnormal cell growth years later.

Basal cell carcinoma, which is the most common type of skin cancer, is often associated with sun exposure. Squamous cell carcinoma, the second most common nonmelanoma skin cancer, is linked to cumulative UV exposure over a lifetime. Studies have shown that individuals who have five or more blistering sunburns in between the ages of 15 and 20 increases the risk of nonmelanoma skin cancer risk by 68%.¹

Therefore, effective prevention and early intervention in childhood are key to preventing skin cancers in adulthood. There are several key methods for reducing UV exposure in children. Specifically, applying a liberal amount of broad-spectrum sunscreen with an appropriate SPF, which should be reapplied more frequently if there is excessive sweating or during swimming. Additionally, wearing protective clothing—particularly long-sleeve shirts, wide-brimmed hats, and sunglasses—is recommended. Moreover, children should be encouraged to avoid outdoor play during peak sun hours, between 10:00 AM and 4:00 PM, when UV rays are strongest. Finally, children should be discouraged from tanning excessively.

Preventive education for both children and parents about the dangers of UV exposure and the importance of sun safety can make a significant difference. The link between childhood sunburns and skin cancer is well-established. It is crucial to balance proper sunlight protection to prevent long-term health consequences, reduce the risk of developing skin cancer, and promote healthier lifestyles. Parents can help reduce the cumulative impact of UV exposure and the risk of skin cancer by ensuring consistent sun protection. This not only decreases the likelihood of painful sunburns but also helps maintain healthy skin and reduces other UV-related skin damage, such as premature aging and sunspots.

¹ American Academy of Dermatology. *Skin Cancer Statistics*. <https://www.aad.org/media/stats-skin-cancer#:~:text=Experiencing%20five%20or%20more%20blistering,skin%20cancer%20risk%20by%2068%25>. Accessed December 2, 2024.