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## MEDBRIEF

# Childhood Sunburns Linked to Future Melanoma Risk

Edited by Deepa Varma

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**TOPLINE:**

In a large cohort study, each additional blistering sunburn before the age of 15 years increased melanoma risk by approximately 3%, and the associated risk was not modified by personal sun sensitivity factors, such as eye and hair color.

**METHODOLOGY:**

- Researchers analyzed data from 44,021 cancer-free non-Hispanic White participants in the United States Radiologic Technologists (USRT) study.
- Follow-up spanned 342,252 person-years, with 290 self-reported melanoma cases identified.
- Participants reported their history of blistering sunburns before and after the age of 15 years, along with personal sun sensitivity factors and ultraviolet (UV) radiation exposure.

**TAKEAWAY:**

- Each additional blistering sunburn before the age of 15 years was associated with a 3.2% increased risk for melanoma (hazard ratio [HR], 1.032;  $P = .005$ ), but no significant association was seen after the age of 15 years.
- The association was consistent regardless of eye color, hair color, UV radiation exposure, or time outdoors.

- Higher melanoma risk was tied to brown/hazel eye color (HR, 1.040; 95% CI, 1.002-1.079), dark hair color (HR, 1.034; 95% CI, 1.005-1.063), and light skin complexion (HR, 1.037; 95% CI, 1.012-1.063).
- Ambient UV exposure and individual sun sensitivity traits did not significantly alter the association between the number of blistering sunburns and melanoma risk.

## IN PRACTICE:

“Our findings underscore the importance of photoprotection in all children and suggest that individuals who experience multiple blistering sunburns before age 15 years (regardless of other risk factors for melanoma) may benefit from enhanced skin cancer surveillance,” the study authors wrote.

## SOURCE:

This study was led by Jim Z. Mai, PhD, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, Maryland. It was [published online](#) on April 24 in the *Journal of the American Academy of Dermatology*.

## LIMITATIONS:

The main limitation of this study was the potential for misclassification due to recall of self-reported number of blistering sunburns.

## DISCLOSURES:

This study was supported by the National Cancer Institute, National Institutes of Health. The authors reported having no conflicts of interest.

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