

Hot Topics in



SKIN HEALTH

May 2023

Peer-reviewed, Evidence-based Information for Physicians

Issue Focus: SUN

MEETING HIGHLIGHTS

AAD 2023 Annual Meeting—Summaries of Sessions and Abstracts from the 2023 Meeting

JOURNAL WATCH

Highlights of Recently Published Research in Skin Health

DIGITAL RESOURCE CENTER

Resources and Events in Skin Health Research & Practice

NEWS & TRENDS

Latest News Updates in Skin Health



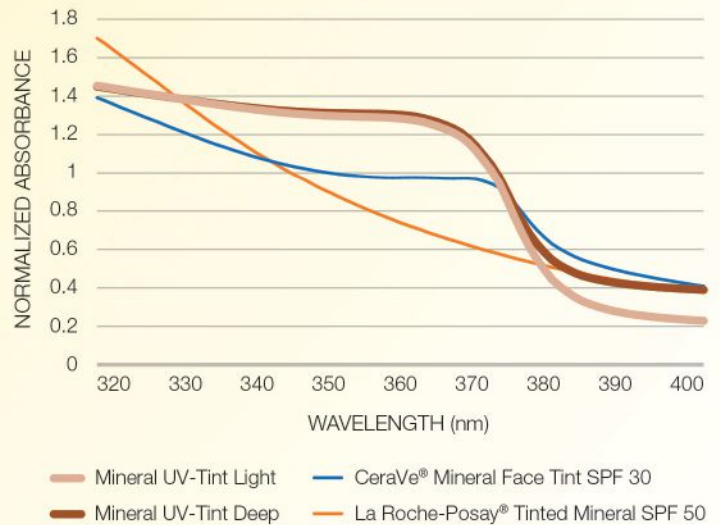


NEUTROGENA® PURESREEN+™ MINERAL UV-TINT FACE LIQUID SUNSCREEN

Superior UVA protection in more shades than leading tinted mineral sunscreens¹



UV absorbance by brand*



- Shows higher in vitro UVA absorbance than both CeraVe® Mineral Face Tint SPF 30 and La Roche-Posay® Tinted Mineral SPF 50
- Entirely mineral, total UVA protection powered by 21.6% zinc oxide and 3.2% titanium dioxide
- Available in 4 shades that accommodate every skin tone, because one shade does not fit all



Learn more about Purescreen+™ technology

Neutrogena®

CeraVe® Mineral Face Tint SPF 30: Titanium Dioxide 5.5%, Zinc Oxide 10%
 La Roche-Posay® Tinted Mineral SPF 50: Titanium Dioxide 11%
 Neutrogena® Purescreen+™ Mineral UV-Tint Face Liquid Sunscreen SPF 30: Titanium Dioxide 3.2%, Zinc Oxide 21.6%

*In-house, static, in vitro screening results on SB6 plates, 0.75 mg/cm² application density, normalized to label SPF.

Reference: 1. Data on file, Johnson & Johnson Consumer Inc.

All third-party trademarks used herein are trademarks of their respective owners.
 Use products only as directed.

© J&JCI 2023 92942 04/23 Printed in USA

SKIN HEALTH

May 2023

Peer-reviewed, Evidence-based Information for Physicians

Issue Focus: SUN

TABLE OF CONTENTS

MEETING HIGHLIGHTS4

**AAD 2023 Annual Meeting—
Summaries of Sessions and Abstracts
from the 2023 Meeting**

JOURNAL WATCH8

**Highlights of Recently Published Research
in Skin Health**

NEWS & TRENDS14

Latest News Updates in Skin Health

DIGITAL RESOURCE CENTER 15

**Resources and Events in Skin Health
Research and Practice**

©2023 Matrix Medical Communications. All rights reserved. This journal is a topic-specific publication that compiles and summarizes peer-reviewed, previously published content for physicians with an interest in skin health management. Opinions expressed by authors, contributors, and advertisers are their own and not necessarily those of Matrix Medical Communications, the editorial staff, or any member of the company's editorial advisory boards. Matrix Medical Communications is not responsible for accuracy of dosages given in the articles printed herein. The appearance of advertisements in this journal is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality, or safety. Matrix Medical Communications disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in the articles or advertisements.

Matrix Medical Communications, LLC
1595 Paoli Pike • Ste 201 • West Chester, PA 19380
Toll-free: (866) 325-9907 • P (484) 266-0702
info@matrixmedcom.com

JOURNAL STAFF

Executive Editor
Elizabeth A. Klumpp

Managing Editor
Austin K. Vitelli

Associate Editor
Julia E. Eckert

Assistant Editor
Amanda B. Tolvaissa

Assistant Editor
Gannon R. Vitelli

BUSINESS STAFF

President/Group Publisher
Robert L. Dougherty

Chief Medical Officer
Giselle J. Geddes, MD

Senior Vice President
Joseph J. Morris

Vice President, Editorial Director
Elizabeth A. Klumpp

Publisher/Director of Digital Media
Ali Kinnie

Finance Director
E. Patrick Scullin

Associate Director of Business Development
Emily A. Scullin

Associate Director of Business Development
Shannon Gillespie

Project Manager
Kim Hooven

Partner
Patrick D. Scullin

Meeting Highlights

American Academy of Dermatology Annual Meeting 2023

March 17–21, 2023 • <https://eposters.aad.org/>

The American Academy of Dermatology (AAD) held its 2023 Annual Meeting on March 17–21, 2023. The meeting provided researchers, physicians, and members of the industry with the opportunity to share and learn about the latest research in dermatology. Speaker and poster sessions presented data from cutting-edge research on multiple dermatological topics, including sun protection. Clinical evaluations of skin health across different populations, as well as discussions of sun protective behaviors and knowledge on sunscreens, were presented. Summaries of key sessions and abstracts are included here.

AAD SESSION SUMMARY— PHOTOPROTECTION IN PEOPLE WITH SKIN OF COLOR

Photoprotection is essential in all individuals to combat the effects of ultraviolet (UV) light exposure. UV-induced erythema, pigment darkening, tanning, photoaging, and photocarcinogenesis impact every skin color, but people experience these effects in various ways.

Visible light (VL) is of particular concern to people of color, as it induces persistent pigmentation in skin phototypes III–VI, but not lighter skin tones. As such, people of color should use a broad-spectrum, tinted sunscreen that protects against both UV light and VL.

VL exposure increases reactive oxygen species (ROS) generation and results in the release of proinflammatory cytokines and matrix metalloproteinases and the activation of epidermal growth factor receptor pathways in keratinocytes. VL-induced ROS and reactive nitrogen species damage the skin barrier, thus causing hyperpigmentation, photoaging, and melasma.

Perception of photoprotective modalities is important to understanding photoprotective behaviors. In one study of over 2,000 Black individuals in California, only 31 percent reported always using at least one form of photoprotection, most commonly sunglasses. Research has shown that, compared to other racial groups, Black individuals have lower rates

of sunscreen use. One study found that Black and Hispanic individuals used sunscreen to prevent conditions such as postinflammatory hyperpigmentation (PIH), vitiligo, and melasma, and not necessarily to prevent skin cancer.

There are various photoprotective modalities to utilize, aside from sunscreen. Wearing a hat with a diameter of at least 7.5cm (or, even better, 10–12cm) that has thick material and weaving can provide SPF seven for the nose, three for the cheeks, five for the neck, and two for the chin. Tightly woven, dark sun-protective clothing made of wool or polyester can reduce UV radiation transmission; beware of cheap brands that break down after one wash, though. Sunglasses that are wrap-around or have side shields with tinted lenses offer great protection against UVA and UVB. Window glass in cars and residential buildings can provide minimal protection as well. Staying in the shade can offer great photoprotection, providing SPF 4 to 50 depending on the density of the foliage.

One study showed that 47 percent of Hispanic individuals rarely or never used sunscreen, and 60 percent rarely or never wore sun-protective clothing. Research on Puerto Rican individuals showed that only 21 percent often or always wore sunscreen, and 38 percent sought shade; interestingly, those who spoke mostly or only English were more likely to use sunscreen, while those who spoke only or mostly Spanish were more likely to stay in the shade. While you cannot make vast generalizations with these findings, it is important to consider which photoprotective modalities individuals prefer in order to encourage positive photoprotective behaviors.

Sunscreen use is also low among Asian patients, with one study from the Southern US reporting that 71 percent of Asian individuals rarely or never use sunscreen, and 67 percent rarely or never seek shade. Another study from California showed that Asian individuals raised in the US engaged in more deliberate sunbathing behaviors than those raised in Asia.

Data on Native American individuals is lacking, but one small study found that only about 10 percent of respondents used sunscreen, despite 87 percent having had a sunburn at least once. The most common reason for not using sunscreen was not liking the feeling of it, followed by forgetting to use it.

A Wake Forest study from 2012 showed that dyschromia was one of the top 10 diagnoses in Black patients at the dermatologist. Some of the most common pigmentary disorders among these patients included vitiligo, melasma, and PIH. Looking at treatments prescribed to patients, sunscreen was much less commonly utilized than other therapies. Dyschromia was also reported as one of the top concerns for Hispanic patients, but not White or Asian patients, although that does not mean these patients do not experience dyschromia.

Photodermatoses in skin of color is another important area of concern. Lupus, chronic actinic dermatitis, and dermatomyositis are all more common in Black patients, compared to non-Hispanic White patients, with the latter being four times more likely to occur in Black individuals.

Those with lighter skin tones should always use a broad-spectrum sunscreen with an SPF of at least 30. Those with darker skin could use SPF 15, due to their lower risk of skin cancer, but SPF 30 is still the safer bet. Tinted sunscreens are crucial in all individuals with skin of color to protect against VL-induced damage, and physical photoprotective modalities are also useful.

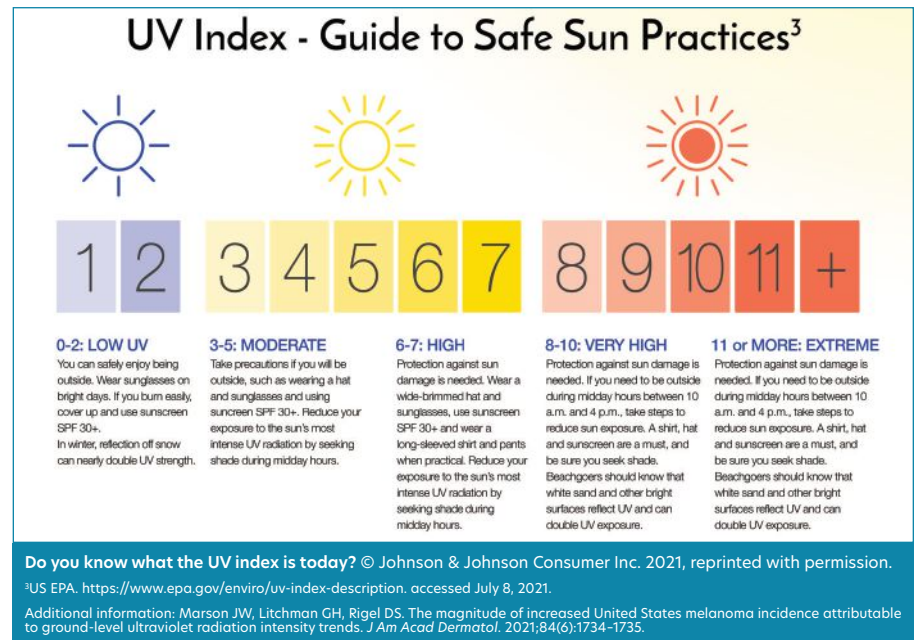
Based on session by Amy McMichael, MD, titled "Photoprotection in Skin of Color People."

AAD ABSTRACT SUMMARIES

Demonstrating the whitening effect of mineral sunscreens across multicultural skin tones. White cast of mineral sunscreens is a crucial consideration among consumers, but this effect varies based on formulation, amount and method of application, and skin tone. Here, Shyr et al evaluated the whitening effect of five mineral sunscreens, with one chemical sunscreen as a control, on multicultural skin tones. Ninety-six female participants, divided into groups based on light (n=32), medium (n=31), and dark skin tones (n=33), completed the study. Whitening was measured by image analysis and participant forced ranking. Under controlled application (2mg/cm²), there was a consistent correlation between image analysis, consumer perception of whitening, and likeability of sunscreen. Regardless of participant skin tone, whiter sunscreen was associated with greater dislike of the sunscreen. All mineral sunscreens had a whitening effect on darker skin tones, with a 2.95-fold increased whitening effect on dark skin tone, compared to light skin tone. Regardless of sunscreen chosen, discretionary application to the face resulted in minimal whitening. For all five mineral sunscreens, there was a significant reduction in whitening effect between controlled and discretionary application. The overall facial application density was 0.93mg/cm², with a lower density observed with mineral sunscreen use (0.84mg/cm²), compared to chemical sunscreen use (1.1mg/cm²). These results suggest that consumers, particularly those with darker skin tones, might apply less sunscreen to compensate for negative aesthetic effects, which could result in less sun protection.

Access abstract here: <https://eposters.aad.org/abstracts/42113>

Guide to tinted sunscreens for skin of color. Unlike nontinted sunscreens, tinted sunscreens protect against both ultraviolet



(UV) light and visible light (VL), both of which can contribute to hyperpigmentation disorders, such as melasma and postinflammatory hyperpigmentation (PIH). Thus, use of tinted sunscreens for photoprotection is particularly important in individuals with skin of color. Tinted sunscreens include iron oxide and pigmentary titanium dioxide, which block VL and UVA1 and provide color to the sunscreen; the tint of the sunscreen depends on the ratio of these two components. Multiple studies have demonstrated that tinted sunscreens provide greater protection from VL-induced pigmentation and hyperpigmentation, compared to nontinted sunscreens. Individuals with skin of color should use a broad-spectrum sunscreen (UVA and UVB protection, plus VL 400–465nm) with a sun protection factor (SPF) of 30 or higher. In addition to iron oxides and pigmentary titanium dioxide, individuals should consider sunscreens containing antioxidants, anti-inflammatory ingredients, or immunomodulators to improve therapeutic action; emollient- or humectant-containing compounds

to prevent pigmentation; and depigmenting agents. When selecting a tinted sunscreen, skin tone and undertone should be considered to pick the most accurate shade.

Access abstract here: <https://eposters.aad.org/abstracts/43028>

The association of parental status with increased sunburn prevalence and sunburn-related activities in females. In this study, Shuja et al conducted a survey to assess sunburn incidence and sunburn-related behaviors among mothers of young children living in the United States (US). The online survey was conducted from August 25 to September 5, 2020, and participants provided information on sunburn experience from January to August 2020. A total of 3,409 individuals of diverse racial/ethnic backgrounds aged between 18 to 50 years completed the survey, with an oversampling of female participants with children under 12 years of age. All Fitzpatrick skin types were represented in the survey. Overall, mothers

of young children were significantly more likely to get a sunburn than other female individuals, with a sunburn prevalence of 37.3 and 22.9 percent, respectively. Black and Hispanic mothers of young children were more than twice as likely to have had a sunburn than other female respondents of the same race/ethnicity, with a sunburn prevalence of 15.3 and 35.8 percent for Black and Hispanic mothers, respectively, and 4.7 and 20.2 percent for other Black and Hispanic female respondents, respectively. White mothers also had a significantly higher sunburn prevalence than other White female respondents (43.1% vs. 29.4%). When divided into subgroups by age, mothers of young children had a higher sunburn prevalence across all subgroups than other female respondents. Being in or near water was the most commonly reported activity during most recent sunburn for both female (59.0%) and male respondents (44.1%). Compared to other White female individuals, White mothers of young children were significantly more likely to experience a sunburn during activities in or near water.

Access abstract here: <https://eposters.aad.org/abstracts/42114>

Analysis of utilization of sun-protective behavior among national SPOT Skin Cancer® program screenees from 2018 to 2019.

Gao et al evaluated the relationship between demographic factors and sun-protective behaviors in 116,569 attendees of the AAD's SPOT Skin Cancer® screening from 2018 to 2019. Screenees were largely White (86.3%), female (61.8%), at least 30 years of age (88.6%), and had a college education (69.6%). Less sun-protective behaviors were associated with lower income and male sex. Compared to White screenees, Hispanic, Asian, and Black screenees were significantly more likely to rarely or never practice sun-protective behaviors. Residents of the Northeastern US were significantly more likely to practice sun-protective behaviors, compared to residents of the Midwestern and Southern US. Individuals whose highest attained education level was elementary school, high school, or college more frequently

reported less sun-protective behaviors than those with a graduate degree.

Access abstract here: <https://eposters.aad.org/abstracts/42099>

A study on the impact of visual, audio media usage on patients of color; understanding the need and usage of sunscreen.

Healthcare literacy on sun damage and protection in skin of color needs to be improved. As such, Fowler-Canty et al surveyed patients of color at a university dermatology clinic to determine the use of audiovisual media in improving healthcare literacy among this population. Participants, aged between 20 and 80 years, watched a 2.5-minute video of an African American healthcare professional, who discussed UV-related skin damage, how to avoid skin damage due to sun exposure, and benefits of sunscreen use. Participants completed pre- and post-video surveys assessing their knowledge. Forty-one individuals participated, 43.9 percent of whom were people of color and 31.7 percent of whom were Hispanic/Latino. After watching the video, all participants indicated they understood the importance of wearing sunscreen to protect against sun damage, compared to 68 percent prior to watching the video. Understanding of the benefits of sunscreen use increased significantly in Black/African American participants after watching the video. Overall, 71 percent of participants indicated they planned to wear sunscreen every day after watching the video, compared to 24 percent who wore sunscreen every day prior to viewing the video.

Access abstract here: <https://eposters.aad.org/abstracts/43485>

Influence of gender, race, and psychiatric disorders on sun protective behavior and outcomes: a population-based study.

Here, Shan et al aimed to assess the association of various demographic factors with sun-protective



Sunburns increase risk of melanoma. © Johnson & Johnson Consumer Inc. 2023 90602 03/23, reprinted with permission.

References: ¹Pfahlberg A, Kölmel KF, Gefeller O. Timing of excessive ultraviolet radiation and melanoma: epidemiology does not support the existence of a critical period of high susceptibility to solar ultraviolet radiation-induced melanoma. *Br J Dermatol*. 2001;144:3:471-475. ²Lew RA, Sober AJ, Cook N, et al. Sun exposure habits in patients with cutaneous melanoma: a case study. *J Dermatol Surg Onc*. 1983;12:981-986.

behaviors. Data from adults who participated in the National Health Interview Survey (NHIS) 2020 were included for analysis. Significantly more female than male participants wore sunscreen (24.72% vs. 10.91%). White individuals wore sunscreen most often, whereas Black individuals wore sunscreen the least. Sunburn incidence and history of melanoma were highest in White individuals, with a prevalence of 25.61 and 3.38 percent, respectively. Sunscreen use was higher and sunburn prevalence lower among the general population, compared to individuals with anxiety, depression, and dementia. Furthermore, incidence of melanoma was increased in individuals with dementia.

Access abstract here: <https://eposters.aad.org/abstracts/43095>

A social media analysis of sunburn-related videos on TikTok.

Here, Siva et al evaluated TikTok videos claiming to be informational about sunburn, as well as their sources. The top 100 videos under “#sunburn” were analyzed. Two independent reviewers assessed the quality of the videos. The hashtag had about 1.2 billion views; the top 100 videos had over 454 million plays and were shared over 1.4 million times. The majority of videos came from laypersons (n=88), with only 12 videos from healthcare professionals, seven of whom were dermatologists. Of the 37 videos discussing sunscreen, only five noted the importance of using SPF 30 or higher and only seven recommended reapplication. Twenty-seven videos discussed sunburn aftercare, with 18 mentioning aloe vera application. Only six videos noted that sunburn increased the risk of melanoma.

Access abstract here: <https://eposters.aad.org/abstracts/44600>

Skin cancer risk factors, screening, and sun protection among the United States Hispanic population.

Comparing sun protection and skin cancer-related

factors and screenings among Hispanic individuals of various origin and non-Hispanic individuals, Yang et al found that severe sunburn with blister prevalence over the past year was more common among non-Hispanic individuals (8.8%) than Hispanic individuals of any origin, ranging from 2.5 percent for Dominican individuals to 6.6 percent for Cuban individuals. Severe sunburn with peeling was also more common in non-Hispanic individuals (23.6%) than Hispanic individuals of any origin (range: 7.7–21%). Compared to non-Hispanic individuals, Hispanic individuals of all origins, were more likely to seek shade. Rates of total body skin exam (TBSE), sunburn, and indoor tanning in the past year were lower in Hispanic individuals of all origins than in non-Hispanic individuals. Mexican individuals were more likely to wear long-sleeves shirts, long pants, and hats and less likely to receive a TBSE than other Hispanic individuals.

Access abstract here: <https://eposters.aad.org/abstracts/44322>

Effects of demographic variables on sun-protective behaviors using the NHANES database from 2005–2020.

Analyzing data from 19,797 individuals who completed the National Health and Nutrition Examination Survey (NHANES) from 2005 to 2008, 2011 to 2014, and 2017 to 2020, Kumar et al determined that there was no correlation between income status or education level and likelihood of seeking sun-protective behaviors. Additionally, shade-seeking behaviors did not differ based on income status or education level. Across all cohorts, those with an income status over three times the poverty line were significantly more likely to wear sunscreen than individuals below the poverty line. College students were likelier than those not yet in high school to wear sunscreen in all three cohorts. However, in the 2017 to 2020 cohort, college students were less likely to wear long-sleeved shirts than those not yet in high school.

Access abstract here: <https://eposters.aad.org/abstracts/44499>

Outdoor activities and sunburn among urban and rural families in a Western region of the US: Implications for skin cancer prevention

Comparing sun protection and outdoor activities among parent-child dyads in rural (n=41) and urban (n=56) areas, Wu et al observed that sunscreen use was higher among those in urban areas than rural areas. Wearing long pants or skirts was higher among children in rural areas than those in urban areas. Unintentional tanning was higher among adults in rural areas, while intentional outdoor tanning was higher among adults in urban areas. Farm work, sports, and yard work were more common among rural than urban residents.

Source: Wu YP, Parsons B, Jo Y. Outdoor activities and sunburn among urban and rural families in a Western region of the US: Implications for skin cancer prevention. *Prev Med Rep.* 2022;29:101914. [HT](#)

A study of factors affecting sun-protective behavior change after surgical treatment of keratinocyte carcinoma.

Here, Marani et al aimed to determine how sun-protective behaviors changed following Mohs micrographic surgery (MMS) for nonmelanoma skin cancer. Twenty-two patients were surveyed immediately before and three months after MMS. On average, the likelihood of practicing sun-protective behaviors and perception of skin cancer risk increased among patients following MMS. The largest behavioral change from pre- to post-MMS among patients was increased sunscreen use (3.09 vs. 3.73), followed by the increase in seeking shade (3.45 vs. 3.77). There was an insignificant positive correlation between lower Fitzpatrick skin type, living with a spouse or children, and larger household and increased sun-protective behaviors post-MMS.

Access abstract here: <https://eposters.aad.org/abstracts/42857> [HT](#)

Journal Watch

Summaries of Recently Published Research in Skin Health

👉 In the digital edition, click the PMID after each summary to access the article/abstract.

Dermatology: how to manage facial hyperpigmentation in skin of color

Moolla S, Miller-Monthrope Y. *Drugs Context*. 2022;11:2021-11-2.

Summary. Hyperpigmentation disorders, such as melasma and postinflammatory hyperpigmentation (PIH), are common in patients with skin of color. Ultraviolet (UV) and visible light (VL) exposure contributes to melasma, and PIH occurs due to cutaneous inflammation caused by endogenous or exogenous factors. Utilizing sunscreen for photoprotection is the most effective way to protect against hyperpigmentation disorders. Various treatment options exist, but chemical peels and light therapy have an increased risk of posttreatment PIH in patients with skin of color.

👉 PMID: 35720052, PMCID: PMC9165630

Postinflammatory hyperpigmentation in dark skin: molecular mechanism and skincare implications

Markiewicz E, Karaman-Jurukovska N, Mammone T, Idowu OC. *Clin Cosmet Investig Dermatol*. 2022;15:2555–2565.

Summary. PIH occurs more frequently in darker skin tones, potentially due to differences in dermal-epidermal junctions, epidermal differentiation and stratification, and increased size and activity of melanocytes. UV radiation (UVR) can exacerbate PIH, so use of a broad-spectrum sunscreen with a sun protection factor (SPF) of 30 or higher is recommended. Topical treatments can also help reduce inflammation and inhibit depigmentation.

👉 PMID: 36466945, PMCID: PMC9709857

Racial differences in perceived risk and sunscreen usage

Florent R, Podwojniak A, Adolphe L, Milani K. *Cureus*. 2023;15(1):e33752.

Summary. Florent et al conducted a survey to evaluate racial differences in perceived sun exposure risks and sun-protective behaviors. Most of the 306 respondents were White (n=259), followed by Asian/Pacific Islander (n=19), Hispanic/Latino (n=15), and Black (n=13). Asian/Pacific Islander and Black participants had a significantly lower perceived risk of UV-related skin damage, compared to White participants. Black respondents reported significantly lower sunscreen usage than White respondents. White patients reported the highest level of education on sun exposure risks, but the difference was not significant between any group.

👉 PMID: 36793846, PMCID: PMC9925027

Tailored sun safety messages for outdoor workers

Fazel SS, Fenton S, Braun N, et al. *Saf Health Work*. 2023;14(1):43–49.

Summary. Here, Fazel et al aimed to develop educational messages to increase sun safety among outdoor workers. The primary recommended actions included providing information on the UV index, using group sources of shade (e.g., tarps, canopies), and accounting for safety goggles and glasses in eye protection. Tips on seeking shade, wearing appropriate clothing, and applying sunscreen were highlighted.

👉 PMID: 36941943, PMCID: PMC10024223

Attitudes, behaviors, and risks of sun protection to prevent skin cancer among children, adolescents, and adults

Raymond-Lezman JR, Riskin S. *Cureus*. 2023;15(2):e34934.

Summary. This review discussed attitudes toward and efforts to encourage sun-protective behaviors among youths and adults. For children and adolescents,

the authors recommended implementing standardized educational programs to improve sun-protective behaviors and adding time for sunscreen reapplication during outdoor activities. Individualized programs or counseling might help reduce UV exposure in parents and their children; however, it is often difficult to cause positive behavioral changes, which poses a barrier to sun safety.

👉 PMID: 36938200, PMCID: PMC10016731

Sun-protective behaviors and sunburn among US adults

McKenzie C, Nahm WJ, Kearney CA, Zampella JG. *Arch Dermatol Res*. 2023:1–10. Epub ahead of print.

Summary. Analyzing data from the 2010, 2015, and 2020 National Health Interview Surveys (NHISs), McKenzie et al identified positive trends in engaging in sun-protective behaviors from 2010 to 2020. Respondents to the 2020 NHIS were more likely to seek shade, wear wide brimmed hats and long-sleeved shirts, apply sunscreen, and avoid sunburn than 2010 respondents. However, there was a decrease in sun avoidance from 2015 to 2020. Sex, age, education level, and sun sensitivity influenced certain behaviors.

👉 PMID: 36790452, PMCID: PMC9930066

A review of the impact of sun safety interventions in children

Baig IT, Petronzio A, Maphet B, Chon S. *Dermatol Pract Concept*. 2023;13(1):e2023066.

Summary. Reviewing articles about education on or changing sun-protective behaviors in children, Baig et al found that the majority of studies measuring knowledge as an outcome saw significant increases in knowledge. Of the 60 studies that measured changes in behaviors, 48 demonstrated a positive impact on sunscreen application, wearing sun-protective clothing and hats, seeking shade, and avoiding outdoor activities

during peak UVR exposure. Ten out of 15 studies showed decreases in sun exposure as well.

👉 PMID: 36892334, PMCID: PMC9946084

Association of sun safety behaviors and barriers with sunburn history in college students in a region with high UV exposure

Miller DT, Baccam Z, Harris RB. *Curr Oncol.* 2022;29(12):9671–9680.

Summary. From September to November 2019, Miller et al surveyed 458 college students in Tucson, Arizona, to determine sun-protective behaviors. A total of 46.9 percent of students reported at least one sunburn within the past three months, with 21 percent reporting multiple sunburns. Using sunscreen most or all of the time while in the sun was reported by 27.5 percent of respondents. Over half of respondents (53.3%) reported intentionally tanning their skin outdoors occasionally or more often, and tanning was significantly associated with sunburn history.

👉 PMID: 36547173, PMCID: PMC9776479

Dynamic visualization of ultraviolet dose on skin with sunscreen applied using minimum erythema dose

Li Z, Kim MA, Kim E, et al. *Skin Res Technol.* 2022;28(4):614–622.

Summary. Here, Li et al developed a software system to dynamically visualize UVB dose on the skin. Environmental factors, SPF, and skin phototype were considered to accurately visualize UVB doses. A spectrum of red expressed in terms of minimum erythema dose (MED) was used to represent UVB dose in the models. Examples of outdoor and indoor exposure demonstrated the utility of the system.

👉 PMID: 35753079, PMCID: PMC9907666

Objectively assessed ultraviolet radiation exposure and sunburn occurrence

Stump TK, Fastner S, Jo Y, et al. *Int J Environ Res Public Health.* 2023;20(7):5234.

Summary. Here, Stump et al analyzed UVR exposure and incidence of sunburn, measured with a wearable UVR sensor over 14 days, among parent-child dyads. Adjusting for Fitzpatrick skin phototype and location, total UVR exposure was associated with sunburn, with a one-standard erythema dose (SED) increase raising the odds of sunburn by 1.26- and 1.28-fold among parents and children, respectively. Likewise, a one-SED increase during peak UVR exposure was correlated with increased odds of sunburn among parents and children.

👉 PMID: 37047850, PMCID: PMC10094127

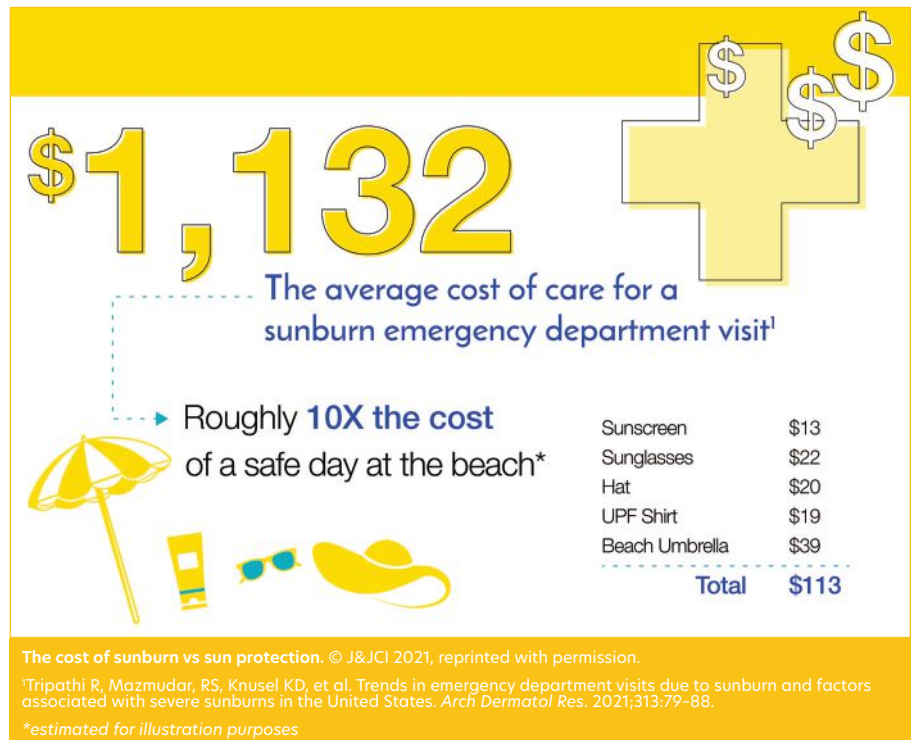
Validity of a Self-Assessment Skin Tone Palette compared to a colorimeter for characterizing skin color for skin cancer research

Martin MK, Zaman T, Okello AM, Dennis LK. *Curr Oncol.* 2023;30(3):3189–3200.

Summary. Martin et al aimed to validate the nine-point Self-Assessment Skin Tone Palette (SASTP) through comparison with melanin index values from a colorimeter for the upper inner arm and outer forearm. Of the 188 participants, 50 percent were White, 30 percent were Hispanic/White-Hispanic, and 20 percent belonged to another racial category. SASTP was well correlated with the melanin index values for participants for both the upper inner arm and outer forearm.

👉 PMID: 36975454, PMCID: PMC10047066

HT




News & Trends

Exploring Skin Health Research in the Media

In the digital edition, click  to access the full article.

NEW TINTED SUNSCREEN OFFERS VARIETY WITH FOUR SHADES


With its lightweight formulation and lack of a white cast, Neutrogena's Purescreen+ Mineral UV Tint Face Sunscreen has become part of Kerry Washington's daily skincare routine. The tinted sunscreen is made with titanium dioxide and zinc oxide to protect against both ultraviolet (UV) A and UVB rays and iron oxide to protect against visible light, which can cause melasma. It also contains vitamin E to fight dryness and reduce free radical damage. Currently, the sunscreen comes in four different shades.

 Read more here: <https://www.wellandgood.com/neutrogena-purescreen-mineral-uv-tint-face-liquid-sunscreen/>

NEW RESEARCH IN SKIN CANCER: MELANOMA, MERKEL CELL CARCINOMA AND BASAL CELL CARCINOMA

Most of today's immunotherapy breakthroughs are built upon research that


began 20-30 years ago, when it was realized that the immune system can vigorously react to melanoma. This treatment strategy should be part of the conversation for most patients with advanced skin cancers, although the strategy may not be appropriate for every patient.

 Read more here: https://www.hopkinsmedicine.org/kimmel_cancer_center/cancers_we_treat/melanoma/research/new_research.html

MELANOMA RESEARCH ALLIANCE AND BIMINI BAY OUTFITTERS JOIN FORCES TO ADVANCE RESEARCH AND PROMOTE SUN SAFETY


The Melanoma Research Alliance (MRA) and Bimini Bay Outfitters are partnering to increase melanoma research and provide educational content on sun safety and melanoma. Topics will include wearing sunscreen and UV protection factor (UPF)

clothing and avoiding intentional tanning. The outdoor apparel company is also donating \$10,000 to MRA.

 Read more here: https://www.prnewswire.com/news-releases/melanoma-research-alliance-and-bimini-bay-outfitters-join-forces-to-advance-research--promote-sun-safety-301800752.html?tc=eml_cleartime


SUNSCREEN FOUNTAIN OF YOUTH: USE OF SUNSCREEN FOR ANTI-AGING PURPOSES INCREASED 25% FROM 2021-22

Over half of sunscreen users in the United States (US) are applying more often than they did a year ago. Eighty-nine percent of adults are using sunscreen to protect against skin cancer, up from 69 percent. Sunscreen is being used to prevent aging in 69 percent of adults, up from 44 percent. Most Black adults (84%) indicated they would like sunscreens made for their skin tones.

 Read more here: <https://finance.yahoo.com/news/sunscreen-fountain-youth-sunscreen-anti-132500566.html>

WHY MELANOMA IS SO DEADLY FOR MEN WHEN IT DOESN'T HAVE TO BE

In the US, more men than women will be diagnosed with invasive melanoma in 2023, according to the Skin Cancer Foundation. Research shows that men are less likely to use sunscreen and have less knowledge about the relationship between skin cancer and sun exposure, compared to women. Men also tend to have higher cumulative sun exposure than women, thus increasing the risk of skin cancer.

 Read more here: <https://www.washingtonpost.com/wellness/2023/04/16/skin-cancer-men-melanoma-prevention/> **HT**

Diversity Under the Sun

Suncare is important for every skin tone.
The risk of sunburn correlates with skin tone - not ethnicity.

Sunburn experiences differ across ethnicities.

An online survey of 3,597 adults who identified as White, Black, Hispanic and Asian showed sunburns occur across all ethnicities - even the darkest skin tones, but the experience is very different.¹

Those who identified as White reported "skin is hot when touching" and "color" as top signs of sunburn.

In contrast, those who identified as Black reported experiencing "peeling", painful or itchy skin.



Diversity Under the Sun. © J&JCI 2022, reprinted with permission.

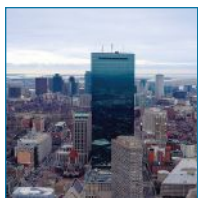
¹Gutierrez DE, Shuja Z, Coubart A, et al. A cross sectional examination of sunburn incidence in the context of race/ethnicity and skin type. *J Am Acad Dermatol.* 2022;87:3 Suppl, AB130.

Digital Resource Center

Upcoming Educational Events and Digital Resources Related to Skin Health

In the digital edition, click  to visit meeting website or for more information.


Upcoming Conferences/Events



MAUI DERM NP+PA SUMMER

June 21–24, 2023

Colorado Springs, Colorado


 www.mauiderm.com



EADV SYMPOSIUM 2023

May 18–20, 2023

Seville, Spain

 <https://eadvsymposium2023.org/>

SKINCARE ACADEMY VIRTUAL LEARNING SERIES



On-demand Video Archive
Available Now on JCAD.TV

Visit jcad.tv/skincare-academy-2022 and register for free to watch SCA Program Chair Joshua Zeichner, MD, along with an esteemed faculty of leading dermatology professionals, deliver virtual webinars covering an array of skin care questions and concerns that patients deal with daily.

Access more video and audio content at jcad.tv

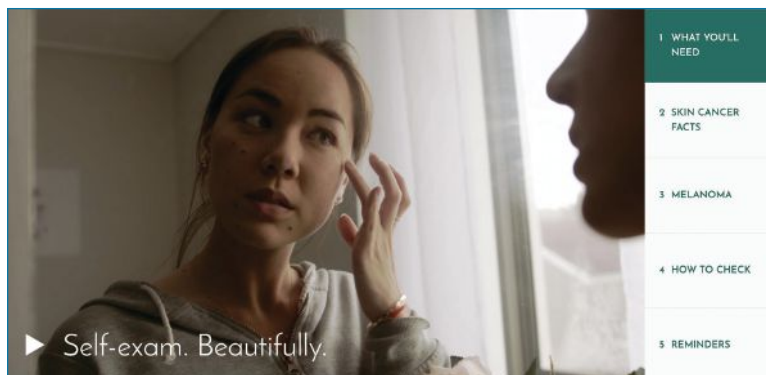


Download the JCAD app!



Follow us @JCADermatology

Patient Resource



VIEW: Self-exam. Beautifully

This self-exam provides individuals with instructions on how to check themselves for both melanoma and nonmelanoma skin cancers. Some signs of skin cancer include new or changing moles, asymmetrical moles, moles with irregular borders, and moles that bleed or itch.

 Access here: <https://www.neutrogena.com/navigation/quizzes/SkinSelfExam.html>

Video Resources



WATCH: Henry W. Lim, MD, FAAD: New UV Filters in the United States and Phototherapy Overview

Dr. Lim discusses two topics covered in his sessions delivered at the AAD 2023 Annual Meeting, including a new UV filter that's been approved in the European Union and the use of phototherapy in dermatology.

 Access here: <https://jcad.tv/henry-lim-aad-2023/>



**Do you know where
your patients go
when they leave
your office?**

We do.

They come to The Skin Cancer Foundation. Every day, 25,000 people visit our website to learn more about their skin cancer. We work closely with our member dermatologists to deliver programs that help your patients and ultimately save lives.

**Become a member and extend
your reach beyond your office.**

[SkinCancer.org/membership](https://www.SkinCancer.org/membership)

