

The Importance of Skin Cancer Awareness and Protective Clothing as Prevention



Understanding Skin Cancer

Skin cancer is the most common form of cancer in the United States, yet it is often underestimated. Each day, approximately 50 people die as a result, and thousands of new cases are diagnosed, making awareness and education essential (Mansouri, 2017). As explained in a study, it was predicted that one in five Americans will develop skin cancer by age 70, with 6.64 million cases estimated in 2021 (The Skin Cancer Foundation, n.d.). Despite its prevalence, many people underestimate its seriousness, often assuming it only affects those with fair complexions or older age. In reality, anyone, regardless of skin tone or age, can develop it.



The lack of awareness often stems from how common sun exposure is in daily life, and most people do not realize how much UV radiation their skin absorbs each day. Therefore, the goal of this post is to help readers understand what skin cancer is, why it matters to be informed about it, and how simple habits, such as wearing protective clothing, can significantly reduce risk. Understanding this disease is the first step toward prevention.

Scientific Explanation

Skin cancer occurs when abnormal cells grow uncontrollably in the epidermis, the outer skin layer (Gordon, 2013). Over time, ultraviolet (UV) radiation damages cellular DNA, and these mutations can

trigger uncontrolled growth (D’Orazio et al., 2013).

The Main Types of Skin Cancer:

- Basal Cell Carcinoma (BCC)
- Squamous Cell Carcinoma (SCC)
- Malignant Melanoma

Medical professionals examine the cells where they first develop to differentiate the classifications. BCC is the most common and least aggressive, starting in basal cells that produce keratin in our skin. SCC stems from mutated cells in the middle of the skin that produce keratin and can spread quickly if left untreated. Melanoma, the deadliest form of skin cancer, develops from melanocytes, the pigment-producing cells that give skin its color (Centers for Disease Control and Prevention [CDC], 2024).

Detection is also important in understanding skin cancer. In regard to appearance, BCC often looks like a waxy or shiny bump, a flat scar-like lesion, or a sore with a scab that does not heal. In contrast, SCC typically appears as a scaly patch, a firm red bump, or a wart and may be tender to the touch. Lastly, melanoma often presents as a new mole or a change in an existing one, with colors ranging from brown and red to pink or white. It can be identified using the ABCDE method, originally developed at New York University as an educational tool for detecting melanoma. This method stands for Asymmetry, Border irregularities, Color variation, Diameter (typically larger than 6 millimeters), and Evolving, referring to changes in shape, size, or color (National Cancer Institute [NCI], n.d.). Understanding what to look for allows for early detection and quicker treatment.

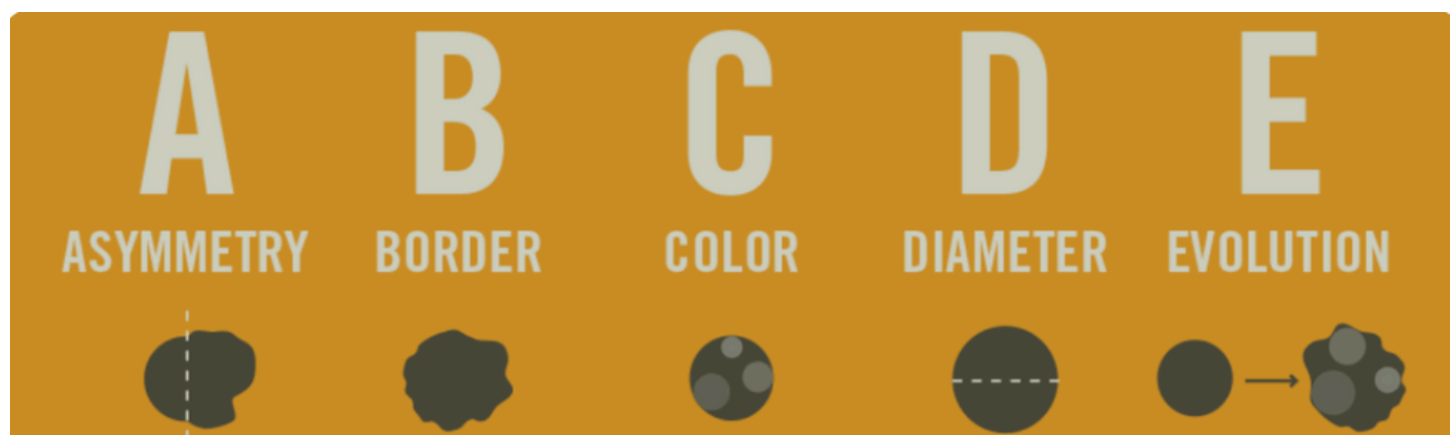


Image From Modern Ritual. Skin Cancer Prevention & Detection

Who is Most at Risk?

While anyone can develop skin cancer, certain factors significantly increase the likelihood. The risk rises with cumulative UV exposure, particularly during childhood and adolescence, when the skin is more sensitive to radiation damage. Studies have shown that experiencing just five or more blistering sunburns between ages 15 and 20 increases melanoma risk by 80% and nonmelanoma skin cancers

by nearly 70% later in life (Wu et al., 2014). This highlights the importance of consistent sun protection from a young age.

Specific groups are also more vulnerable due to lifestyle and occupational exposure. Outdoor workers such as lifeguards spend long hours in direct sunlight, often without sufficient protection. Similarly, athletes who train outside, such as swimmers, face prolonged UV exposure, sometimes during peak hours when rays are strongest.

Another major contributor is UV exposure from tanning beds. According to the American Academy of Dermatology, using tanning beds before the age of 35 increases the risk of developing melanoma, the deadliest form of skin cancer, by 59% (AAD, 2023). Despite the health risks, tanning bed use remains common, contributing to rising cases of skin cancer in younger populations. This growing trend shows the need for greater awareness and education about safe sun practices.



Protective Clothing + How to Choose

Although certain factors, such as outdoor activities that involve prolonged sun exposure, can increase your susceptibility to skin cancer, there are preventive steps you can take beforehand to lessen the risk. The American Academy of Dermatology recommends wearing protective clothing when spending time in the sun (Berry, 2022). Clothing made with UV-blocking fabrics offers strong protection from harmful rays, especially when specifically designed for UV defense (Hoffmann et al., 2001). Because more than 90% of skin cancer cases result from direct sun exposure, using protective clothing is an effective way to lower the risk (D’Orazio, 2013).

Protective clothing provides an advantage that sunscreen alone cannot, as it doesn’t wear off, wipe away, or require constant reapplication. Clothing serves as a physical barrier that helps preserve the skin over time.

Not all fabrics protect the skin equally. Tight-woven or knit fabrics generally block more UV than thin cotton. Lighter colors may reflect radiation but allow more UV through, while darker shades absorb radiation. In addition, clothing labeled with an Ultraviolet Protection Factor (UPF) rating indicates how effectively it blocks UV rays. For instance, UPF 50 fabric blocks approximately 98% of harmful UV radiation (Lu & Ilyas, 2022). When UPF isn’t available, it’s recommended to hold the fabric up to the light. If it is easily see-through, that is an indicator of poor coverage.

Overall, while protective clothing does not replace sunscreen, it reduces the need for reapplication and provides lasting coverage from harmful UV rays, making it a practical way to prevent skin cancer.



Additional Prevention Tips

Even with protective clothing, healthy sun habits are crucial:

- Avoid peak sunlight hours (10 a.m. -4 pm)

- Use broad-spectrum sunscreen daily and reapply
- Wear sunglasses and wide-brimmed hats for extra coverage
- Be consistent- be aware of the sun even on cloudy days

To conclude, being one of the most common diseases, skin cancer is also highly preventable. Understanding how UV exposure damages the skin and adopting protective habits early in life can make a significant difference. While sunscreen plays an important role, simple choices, such as being mindful of what you wear in the sun, also provide important protection. Overall, protecting your skin is not just about appearance, but an investment in your long-term health and well-being.

Sources

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