# Protect Your Skin from the Sun

**K-STATE** Research and Extension

Family and Consumer Sciences

# FACT SHEET

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## Introduction

Spending time outdoors is a favorite pastime for many individuals and families, and many people have outdoor careers. Families enjoy sports, hiking, swimming, and other activities to not only have fun but to stay physically active to improve their health. When outdoors, it's important to stay sun safe and understand how ultraviolet (UV) rays can damage skin cells and how to best protect yourself and loved ones from harmful rays.

Skin cancer facts are striking. One in five Americans will develop skin cancer, which is the world's most common cancer, according to the Skin Cancer Foundation. Skin cancer impacts all people, no matter their age, skin color, or gender. Nearly 20 Americans die every day from melanoma, which is the deadliest form of skin cancer. The American Academy of Dermatology states that the annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, while the average annual cost of treating melanoma is \$3.3 billion.

The sun's UV rays not only contribute to skin cancer, but excessive, unprotected sun exposure also causes signs of early aging on your skin like age spots and wrinkles. Everyone should take daily precautions when working or playing outdoors to decrease their risk of premature aging and skin cancer.

# **Types of Skin Cancers**

According to the American Academy of Dermatology, skin cancer is defined as an abnormal growth of skin cells usually caused by the sun's harmful UV rays. Skin cancer is not contagious, and when caught early, skin cancer is highly treatable.

**Basal Cell Carcinoma (BCC)** is the most common type of skin cancer and frequently develops in people with fair skin. BCCs usually develop after years of frequent sun exposure or indoor tanning and show up on the head, face, neck, and arms, but they can form anywhere on the body. Early diagnosis through self-examination and a doctor's examination are critical because basal cell carcinomas can grow deep and penetrate the nerves and bones.

**Squamous Cell Carcinoma (SCC)** is the second most common type of skin cancer and often looks like a red firm bump, scaly patch, or a sore that will not heal. SCCs form on the rim of the ear, face, neck, arms, chest, and back. Like basal cell carcinoma, early diagnosis and treatment can prevent deep growth and spreading to other areas of the body.

**Melanoma** can develop within a mole or appear suddenly as a dark spot and tends to spread. Due to this tendency to spread, melanoma is often referred to as "the most serious skin cancer." Catching and treating melanoma early is crucial, as nearly 20 Americans die from melanoma every day. According to the Melanoma Research Foundation, melanoma is the fifth most diagnosed form of cancer in people aged 30 to 39. Understanding the ABCDE warning signs of melanoma can help you detect early melanoma.

A symmetry: One half of the spot is unlike the other half.

Border: The spot has an irregular or scalloped border.

Olor: The spot has varying colors, such as tan, white, red, blue, black, or brown.

Diameter: Although sometimes smaller, melanomas are usually larger than <sup>1</sup>/<sub>4</sub> inch across, or the size of a pencil eraser.

Evolving: The spot looks different and changes size, shape, or color.

If you notice any of the ABCDE's of melanoma on your body, schedule a visit with your doctor or dermatologist as soon as possible.

# **Early Detection**

You know your body best. By examining your skin monthly, and looking for anything new or unusual, you can catch potentially dangerous conditions when they are still treatable. When performing a full-body monthly self-exam, face the mirror and check your face, ears, neck, under breasts, chest, and belly. Check your underarms, both sides of your arms, tops and palms of hands, in between fingers, and under your fingernails. Next, sit down and check your thighs, shins, tops of feet, in between toes, and under your toenails. Utilize a hand mirror to look at the bottoms of your feet, calves, and backs of thighs. Continue to your lower and upper back, buttocks and genital area, back of neck and ears. Wrap up your monthly self-exam by using a comb to part your hair to check your scalp. The American Cancer Society recommends specifically looking for:

- New, growing, or changing growth, a spot, or bump on the skin;
- A sore that bleeds and/or doesn't heal after several weeks;
- Rough or scaly red patches which may crust or bleed;
- Wart-like growths;
- A mole (or other spot on the skin) that's new or changing in size, shape, or color;
- A mole with an odd shape, irregular borders, or areas of different colors.

If you notice any of the above skin conditions on your body, or anything else suspicious, schedule a visit to your doctor or dermatologist.

# **Everyday Precautions**

**Seek Shade:** The sun's rays are strongest between 10 a.m. and 4 p.m. When possible, it's best to stay indoors or in the shade during these hours for the greatest protection. Take regular breaks in the shade when available to not only stay cool in the summer months, but also to protect your skin. Utilize the "shadow test" to gauge the sun's intensity. When your shadow appears shorter than you, seek shade. When shade is not available or you have outdoor obligations, be sure to apply sunscreen regularly and wear protective clothing.

Wear Protective Clothing: Wear a wide brimmed hat with no holes in the fabric, sunglasses with UV protection, and lightweight and dark colored long-sleeved shirts and pants. For even more protection, select clothing with an ultraviolet protection factor (UPF) number on the label. Even when wearing protective clothing, be sure to regularly apply sunscreen.

**Apply Sunscreen Daily:** Make it a habit before applying make-up or brushing your teeth, to apply sunscreen every day. All individuals can benefit from applying sunscreen. If wearing sandals or shoes that do not cover the whole foot, apply sunscreen to your feet.

**Avoid Tanning Beds.** Ultraviolet light from tanning beds can cause skin cancer and premature skin damage such as wrinkling.

#### Sunscreen

**Choose broad spectrum, water resistant 30 SPF sunscreen.** Broad spectrum sunscreen will help protect from UVB and UVA rays. The Sun Protection Factor (SPF) indicates how well a sunscreen protects against sunburn.

**Do not use expired sunscreen.** If you're using enough sunscreen daily and when in the sun, you should not have any trouble utilizing a tube or can before it has expired.

Use enough sunscreen to cover all exposed areas. Focus on the face, nose, ears, shoulders, feet, hands, back, arms, and even the back of your knees. Wide brimmed hats are encouraged, but if you're not wearing a hat, be sure to apply sunscreen to your scalp.

Apply sunscreen 15 to 30 minutes before going outdoors. It takes time for your skin to absorb the sunscreen to protect you.

**Reapply sunscreen at least every 2 hours.** When swimming, sweating, or drying off with a towel, apply more often. With each application, use at least a golf ball sized amount.

**Thoroughly rub in spray sunscreen.** Simply spraying sunscreen on your body is not enough to ensure protection. Spray the sunscreen onto the body, out of wind, and rub in. Avoid inhaling spray sunscreen and do not spray the sunscreen near your face and mouth. Spray the sunscreen into your palm, then apply it to your face and ears.

#### **Outdoor Workers**

Farmers and outdoor workers are exposed to 2 to 3 times more radiation than indoor workers. If you are an individual who has a career that requires most of your days being spent outdoors, there are daily precautions you can implement to reduce your risk of skin cancer. Take breaks in the shade when available. Pack a wide-brimmed hat and UV sunglasses in a convenient place such as in your truck or tractor. Be sure to wear these items when out in the sun or in the tractor. Wear a lightweight, comfortable dark colored long-sleeved shirt for extra protection. It is not recommended to keep sunscreen in a hot location such as a vehicle or implement, so be sure to apply before going outside and keep the sunscreen in a cool place to reapply throughout the day.

Due to the increased sun exposure, farmers and outdoor workers are highly encouraged to not only

perform monthly self-examinations, but also visit their doctor or dermatologist annually for a skin cancer exam.

# **Selecting Sun Safe Clothing**

Clothing and accessories with UPF will help shield your skin from the sun, but it's important to note that not all colors and fabrics will provide the same protection. The Skin Cancer Foundation offers the following tips when shopping for apparel to protect your skin.

**Color:** Choose dark or bright colors over lighter shades. Dark or bright colored clothing absorbs UV rays instead of allowing them to penetrate the skin.

**Construction:** Choose densely woven clothing such as denim, wool, or synthetic fibers. Hold the fabric up to the light. If you can see through it, the sun will easily reach your skin.

**Fit:** Comfortable, loose-fitting clothing is preferred over tight clothing.

**UPF:** Look for an Ultraviolet Protection Factor (UPF). This number measures the amount of UV radiation that can penetrate fabric and reach your skin. The UPF indicates how much UV radiation (UVA and UVB rays) a fabric allows to reach your skin. A UPF of 30 to 49 offers very good protection, while UPF of 50+ offers excellent protection.

**Coverage:** To better protect your skin, choose clothing that protects the most surface area such as long-sleeved shirts and long pants.

Be sure to select sun protective clothing and accessories that fit well and that you will actually wear. Make it a habit to wear the items each time you are outdoors.

## **Special Care for Little Ones**

It's never too early to protect your skin from the sun. The American Academy of Dermatology stresses that sunburns during childhood or adolescence can increase the odds of developing melanoma later in life. Do your part and not only be a role model for young children and babies but help them develop sun safe habits.

For babies 6 months and younger, it's best to keep them in the shade rather than use sunscreen due to their sensitive skin. Cover the baby's arms and legs and use a wide-brimmed hat with chin strap, UV sunglasses, and a stroller with UPF sunshade. For toddlers and young children, apply a broad spectrum sunscreen of 30 SPF to all parts of the body before going outdoors and reapply every 1.5 to 2 hours. Utilize long-sleeved shirts, hats, and UV sunglasses. Stay in the shade as much as possible and keep your young children hydrated. Be a role model by wearing sunscreen, UV sunglasses, and a wide-brimmed hat.

## **Next Steps**

- Perform a monthly self-examination and look for anything on your skin. Schedule an appointment and visit your doctor or dermatologist immediately if you notice anything *new*, *changing*, or *unusual* on your skin.
- Schedule your annual skin cancer check.
- Purchase or locate broad spectrum sunscreen, a wide brimmed hat, UV sunglasses, and long-sleeved shirts and pants and utilize when outdoors.
- Brainstorm how you can increase skin protection in your community. Does your local daycare or grade school have adequate shade or policies in place that encourage hats and sunscreen to be worn when youth are outdoors?

## Conclusion

Skin cancer impacts all people, no matter their age, skin color, or gender. Everyone should take everyday precautions to reduce their risk of damage from the sun, especially those who work outdoors. Monthly skin checks are an excellent way to examine your body for any new, changing, or unusual spots on your skin.

#### **References and Resources:**

American Academy of Dermatology www.AAD.org

American Cancer Society www.cancer.org

Melanoma Research Foundation https://melanoma.org/

Skin Cancer Foundation, www.skincancer.org

The University of Texas MD Anderson Cancer Center <a href="https://www.mdanderson.org/">https://www.mdanderson.org/</a>

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