


Play it Safe

> Protect Yourself from the
Sun and Skin Cancer





Enjoy the **Outdoors,** Leave Out the **Tan!**

Outdoor fun does wonders for the body and soul. Just remember that your skin needs extra protection from certain outdoor elements—with the sun heading the list. And it's not just about painful sunburns. Sun damage causes premature skin aging, including wrinkles, spots, and dry, leathery texture. It can also lead to skin cancer.

Use this booklet to learn how you can protect yourself—and your kids—from the harmful effects of the sun. Plus, you'll learn how to check your skin for melanoma—a deadly form of skin cancer that is highly curable when detected in its earliest stages and treated.

The bottom line is: you need to protect yourself all year round.

Sun Facts

- > You can get a sunburn even on a cloudy day! Up to 80% of the sun's rays can penetrate light clouds, mist, and fog.¹
- > Snow reflects the sun like a mirror. Fresh snow reflects nearly 90% of the sun's rays.²
- > You can burn while you are in the water! Water reflects 8% of the sun's radiation.²
- > Dry surfaces reflect some of the sun's rays! Concrete reflects up to 85% of the sun's rays.¹
- > Protecting skin during the first 18 years of life can reduce the risk of some types of skin cancer by up to 78%.³



Ultraviolet Radiation (UV)

UV rays are the sun's invisible "burning" rays which sometimes can also cause skin cancer. There are three types of ultraviolet rays:

- > **UVA rays**
 - Maintain the same intensity throughout the entire year
 - Penetrate the skin's layers more deeply than UVB rays⁴
 - Contribute to premature skin aging, wrinkling, and sunburn⁴

- > **UVB rays**

- Shorter but stronger than UVA; more intense during the summer months, at higher altitudes, and closer to the equator⁴
- Primary cause of sunburn, skin aging, skin cancer, and cataracts^{4,5}

- > **UVC rays**

- Strongest and most dangerous⁴
- Normally filtered by ozone layer and do not reach the Earth⁴

The amount of UV you are exposed to changes with the time of day, seasons, weather conditions, and where you are. UV is greatest when the sun is highest in the sky—midday, between 10 AM and 4 PM.⁶ While UV exposure is greatest in the summer, UV reaches the Earth every day. The bottom line is: you need to protect yourself all year round.

How to Get the Best Protection

Protect yourself during any outdoor activity with a sunscreen that has an SPF (Sun Protection Factor) of at least 15. Plus, choose one whose label specifically says that it provides broad-spectrum protection from both UVA and UVB rays. The SPF numbers are based on the time skin would normally take to burn without a sunscreen. For example, if your skin burns in 20 minutes, an SPF of 10 would protect your skin for 200 minutes or 10 times as long.⁷

Apply sunscreen 15 to 30 minutes before going outdoors to allow penetration into the upper skin layers and better protection. Reapply after 2 hours. Don't forget to protect your lips with a lip balm that has an SPF of at least 15.⁷ Also, be aware that some kinds of medication can make you more sun-sensitive. This includes many common drug therapies, such as oral contraceptives; antibiotics; blood pressure, arthritis, and depression medications; and skin treatments.⁸

The American Academy of Dermatology and other experts recommend these guidelines:

- > Limit your time in the sun between 10 AM and 4 PM, when the sun's rays are the strongest.
- > Use a broad-spectrum sunscreen (protection from both UVA and UVB rays) every day and start using it on your kids at age 6 months.
- > Reapply sunscreen (including waterproof sunscreens) every 2 hours, especially if you're swimming or sweating.
- > Cover up with long pants and a long-sleeved shirt.
- > Tightly woven, dark-colored fabrics give more protection.
- > Wear a 4-inch wide, broad-brimmed hat and sunglasses with UV-protection lenses.

Don't Forget the Kids!

Experts warn that even one severe sunburn during childhood or adolescence can increase the risk of skin cancer.⁵ And considering that more than one half of a person's lifetime UV exposure occurs during childhood and the teenage years,⁵ you need to practice these safety tips consistently:

- > During the summer, don't let the kids out the door without a sunscreen of SPF 15 or higher, even on cloudy days.
- > Make sure they stay out of the sun between 10 AM and 4 PM.
- > Keep babies 6 months or younger out of the sun whenever possible.⁹

Understanding Melanoma

Melanoma is the most dangerous form of skin cancer. It begins in the type of skin cell called a melanocyte. As part of the tanning process, these skin cells produce large amounts of skin pigment, or melanin, to help protect the skin from burning.¹⁰

The main cause of melanoma appears to be related to excessive UV exposure. Although it accounts for only about 5% of all skin cancer cases, melanoma is the leading cause of all skin cancer-related deaths—approximately 74%.¹¹

Who Is at Risk?

Anyone exposed to large amounts of sunlight (such as people who work outdoors or who live in areas where sunlight is very strong, like the American Southwest) are at higher risk. Several other factors can put you at risk, including¹²:

- > Personal or family history of pigmented skin blemishes (dysplastic nevi or melanoma)
- > Fair complexion
- > Red hair
- > Freckling
- > Severe childhood sunburn
- > Large pigmented skin blemishes (congenital nevi)



People of Color Still at Risk

While the incidence of melanoma is much lower in African Americans than Caucasians, people with dark brown or black skin are still at risk of developing skin cancer. Mistakenly, many believe that the additional melanin (or pigment) in their skin prevents melanoma from developing in African Americans. While the pigment offers some protection, overexposure to UV rays can still lead to melanoma in African Americans.¹³

Long-term survival for African Americans diagnosed with melanoma is significantly lower than for Caucasians, 58.8% compared to 84.8%. While most Caucasian patients develop melanoma on areas exposed to the sun, most African Americans develop melanoma on areas that are not regularly exposed to the sun, such as the feet and toenails, or the mucous membranes of the mouth, nasal passages, or genitals.¹³

A change in an existing mole's size or shape may be a sign of melanoma.

Melanoma: What to Look For

Melanoma can appear suddenly as a new mole, or it can develop slowly in or near an existing mole. In men, melanomas are often found on the trunk (between the shoulders and hips). In women, melanomas often develop on the lower legs. Use the following ABCDE approach to identify moles that you should show your doctor.^{10,11,14}

A Asymmetry

Melanoma (cancerous and malignant) lesions are typically irregular in shape (asymmetrical); benign (noncancerous and nonmalignant) moles are typically round (symmetrical).



B Border

Melanoma lesions often have uneven borders (ragged or notched edges); benign moles have smooth, even borders.



C Color

Melanoma lesions often contain many shades of brown or black; benign moles are usually a single shade of brown.



D Diameter

Melanoma lesions are often more than 5 millimeters in diameter (a little smaller than the size of a pencil eraser); benign moles are usually less than 5 millimeters in diameter.¹¹



E Evolution

A change in an existing mole's size or shape may be a sign of melanoma.



Tell your doctor if you notice any odd-looking moles or markings, or any changes in existing moles.¹⁰

Sun Safety Quiz

You can enjoy the outdoors safely; just know the facts about sun safety and skin cancer. Take the quiz below to see just how much you understand about sun safety. A full explanation of the answer is found on the reverse side. What you may learn will help you and your family enjoy the sun and the outdoors—SAFELY.

Are these statements true or false?

1. UVA rays are the most common cause of sunburns. _____
2. A sunscreen with an SPF (sun protection factor) of 10 means that the sunscreen will protect you 10 times as long as without it. _____
3. You should wear sunscreen throughout the year, even during the winter. _____
4. Going to a tanning salon can protect you from skin cancer by preparing you for sun exposure. _____
5. It is recommended that you have a full-body screening examination for skin cancer performed on a regular basis by your health care professional. _____
6. Skin cancers are more easily treated than other types of cancer because they affect only the skin, not the internal organs. _____

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Sun Safety Quiz Answers

- FALSE** 1. **UVB rays are the most common cause of sunburns.** There are three types of ultraviolet radiation: UVA, UVB, and UVC. UVA rays maintain the same intensity throughout the year. They penetrate more deeply into the skin's layers than UVB rays and are the primary contributor to premature skin aging and wrinkling. UVB rays are stronger than UVA rays and are more intense during the summer, as well as at higher altitudes and closer to the equator. And while UVC rays are the strongest and most dangerous, they are normally filtered out by the ozone layer and do not reach the Earth. So be sure to choose a sunscreen that provides *broad-spectrum protection from both UVA and UVB rays*.
- TRUE** 2. **The SPF numbers are based on the time skin would normally take to burn without a sunscreen.** For example, if your skin burns in 20 minutes, an SPF of 10 would protect your skin for 200 minutes, or 10 times as long. However, while this might sound like enough protection, most skin experts recommend that you always use a sunscreen with an SPF of 15 or higher.⁷
- TRUE** 3. **While UV exposure is greatest in the summer, UV rays reach the Earth every day.** Snow reflects the sun like a mirror. Fresh snow reflects nearly 90% of the sun's rays.² You can even burn on a cloudy day.⁷ Up to 80% of the sun's rays can penetrate light clouds, mist, and fog.¹ So basically, *you need to protect yourself all year round*.
- FALSE** 4. **Overexposure to UV rays—outdoors or in a tanning salon—causes skin cancer.** Tumors typically occur on areas most often exposed to the sun, but melanoma, a form of skin cancer, is common in areas that occasionally receive intense exposure, such as the legs.¹⁴ The best way to protect yourself is by limiting sun exposure, using a sunscreen with an SPF of at least 15, and wearing protective, outdoor clothing, including long sleeves and a wide-brimmed hat.¹⁷
- TRUE** 5. **Melanomas can occur in hard-to-see areas of the body that aren't exposed to the sun, and it often takes the trained eye of a dermatologist to spot melanomas in the early stages.** Therefore, it's recommended that you have a regularly scheduled full-body screening examination with your health care professional—and do a self-exam for any odd-looking or altered moles regularly.¹⁵ In women, melanomas often develop on the lower legs, but can also appear elsewhere.¹⁴ In men, melanomas are often found on the trunk (between the shoulders and hips).¹⁴ Remember, melanoma is highly curable when detected in its earliest stages and treated.
- TRUE** 6. **The most commonly diagnosed skin cancer, basal and squamous cell carcinomas, are highly curable.** Melanoma, however, can quickly spread (metastasize) to the lungs, liver, brain, and bones.¹² The national incidence of melanoma continues to rise at the rate of approximately 3% each year since 1980.¹¹

Schedule **Full-Body Screenings** Regularly

Besides using a sunscreen with an SPF of 15 or higher, a regularly scheduled full-body exam by your health care professional is key to prevention.¹⁵ This is because melanoma can occur on areas of your body that aren't exposed to the sun.

Plus, it often takes a trained eye to spot melanoma in the early stages. You also should examine yourself regularly, ideally after a bath or shower while standing in front of a full-length mirror. Use a handheld mirror to help you view areas that are difficult to see. If you notice any odd-looking mole or marking, contact your doctor as soon as possible.



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For more information about melanoma, visit www.melanoma.com

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> Protect yourself—and your kids—
from the harmful effects of the sun.

For additional information about sun safety
and melanoma, visit www.melanoma.com

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