Why You Should Know About Melanoma
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More than one million Americans are diagnosed each year with skin cancer, the most common form of cancer. Of these, about 59,600 people will be diagnosed with melanoma, the most serious of the common types of skin cancer.

Most melanomas can be found early and treated successfully. These next few pages describe risk factors and important tips for finding melanoma early.

There are three main types of skin cancer. Most are either basal cell or squamous cell carcinomas, which seldom become life threatening. Melanoma is less common, but if not found early and treated promptly, it can be very dangerous.

When diagnosed early, melanoma can be cured. Therefore, it’s important to recognize any changes in your skin and report them to your doctor without delay.
What Is Melanoma?

Melanoma is a cancer that begins in melanocytes, the cells that produce the skin coloring or protective pigment called melanin. Melanin helps protect the deeper layers of the skin from the harmful effects of the sun. When exposed to sunlight, the melanin in your skin increases, and your skin darkens.

Melanoma cells usually still produce melanin. This is why these cancers may have mixed shades of tan, brown, blue, or black.

Unlike basal cell and squamous cell carcinomas of the skin, which do not commonly spread to other parts of the body, melanoma can spread if not diagnosed and treated at an early stage. Once melanoma cells reach vital internal organs and grow, they are more difficult to treat and are much less likely to be cured.

While melanoma may appear in the skin without warning, it may also begin in or near a mole or other dark spot in the skin. That is why it’s important to know the color, size, and location of the moles on your body, so you’ll notice any changes that take place.

What Causes Melanoma?

Ultraviolet (UV) radiation can damage DNA, the genetic material in our cells. Sometimes this damage affects certain genes that control how and when cells grow and divide. If these genes do not work properly, the affected cells may form a melanoma.

Most UV radiation comes from sunlight, but some may come from artificial sources such as tanning booths. Some of this exposure may have occurred within a few years before the beginning of the cancer. However, much of it may be due to exposures that happened many years earlier. Children and young adults often receive a lot of intense sun exposure that may not result in cancer for many years or even decades.
In some families with inherited melanomas, gene changes that increase the risk of melanoma are passed from one generation to the next.

Although most moles never turn into a melanoma, some do. DNA changes can cause the cells of a mole to change into melanoma cells. But it is still not known why some moles become malignant or why having many moles or atypical moles increases a person’s risk of getting melanoma.

**Who Is Likely to Get Melanoma?**

No one is entirely free from getting melanoma.

People who have the highest risk of melanoma have many moles, irregular moles, or large moles. Those with close blood relatives who have had melanoma or who have previously had melanoma themselves are also at high risk. This can be caused by a family lifestyle of frequent sun exposure, a family of fair skin, inheriting a gene mutation, or a combination of these factors. Some dermatologists recommend that those with a history of melanoma in a first-degree relative (mother, father, sister, son, etc.) have a skin exam to determine their risk of melanoma.

Other people who develop melanoma may have fair skin that burns and freckles easily, as well as naturally red or blond hair. They may have had sunburns as a child or young adult, or other types of cancerous or precancerous spots on their skin at any age. Although melanoma is less common among people with darker skin, who seldom become sunburned, no one is immune to melanoma.

The risk is also higher in places where there is intense year-round sunshine. As with most other cancers, the chance of developing melanoma increases as a person gets older.
It was once believed that dark brown or black skin prevented melanoma. When melanoma develops in people whose untanned skin color is brown, it commonly occurs on the palms, soles of the feet, and under the nails.

**What Is the Difference Between a Melanoma and an Ordinary Mole?**

An ordinary mole is an evenly colored brown, tan, or flesh-colored spot in the skin. It is either flat or raised. Its shape is round or oval, and it has sharply defined borders. Moles are generally less than six millimeters in diameter (about the size of a pencil eraser). A mole may be present at birth, or it may appear later, usually in the first few decades of life. Sometimes several moles appear at about the same time, especially on areas of the skin exposed to the sun. Once a mole has fully developed, it normally remains the same size, shape, and color for many years. Most moles fade as the person gets older.

**Warning Signs**

The most important warning sign is a new or changing skin growth. This could be a new growth or a change in size, shape, or color of a spot on your skin that progresses over a month or more.

Most of us have spots on our skin. A non-cancerous growth may sometimes look like a skin cancer. Almost everyone has moles. Most moles are harmless. A change in a mole’s appearance is a sign that you should see your doctor. Here’s the simple ABCD rule to help you remember.
A. **Asymmetry:** One half of the spot does not match the other half.

B. **Border irregularity:** Normal moles are round or oval. The borders of a melanoma may be uneven or notched.

C. **Color:** Common moles are usually one color throughout. Melanomas may have several colors or an irregular pattern of colors.

D. **Diameter:** Common moles are generally less than $\frac{1}{4}$ inch in diameter (the diameter of a pencil eraser). Melanomas may be $\frac{1}{8}$ to $\frac{1}{4}$ inch but are often larger.

Use this guide to measure spots on your skin.

- $\frac{1}{2}$" (Large)
- $\frac{1}{4}$" (Medium)
- $\frac{1}{8}$" (Small)

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**Asymmetry**

**Border irregularity**

**Color**

**Diameter**
But remember that although these are useful warning signs, many melanomas and other skin cancers do not have the ABCD signs.

**Other Warning Signs of Melanoma**

Other warning signs include:
- a sore that does not heal
- the spread of pigment from the border into surrounding skin
- change in sensation – itchiness, tenderness, or pain
- change in the surface of a mole – oozing, bleeding, or the appearance of a bump or nodule
- a mole that stands out or looks really different from your other moles

**How Is Melanoma Diagnosed?**

If your doctor suspects that a change in your skin is a sign of melanoma, a sample of the area is removed. This procedure is called a biopsy and can usually be done quickly and easily in the doctor’s office. The sample is then sent to a pathology laboratory for examination under a microscope to confirm the diagnosis.

**Can Melanoma Be Treated?**

Surgery is the best way to treat early melanomas. Later stages may require more extensive treatment. Again, the best weapon against melanoma is finding it and removing it early.

**Is There Any Way to Prevent Melanoma?**

By avoiding exposure to intense sunlight, you can reduce your risk. This is especially true for fair-skinned people and those with a tendency to develop many moles or atypical moles, or those who are at increased risk for any reason. Avoid unprotected sun exposure when the sun is
high in the sky. Wear protective clothing, sunglasses, and a hat. Use a sunscreen with a sun protection factor (SPF) of 30 or higher. Remember, sunscreen doesn’t provide total protection from ultra-violet (UV) rays, although it does help. For the best effect, you will need to apply the sunscreen before you go out, again after a half hour, and again after swimming or sweating excessively. Indoor sunlamps and tanning beds also increase your risk of skin cancer.

**Check Your Skin Thoroughly Once a Month**

Get familiar with your skin and your own pattern of moles, freckles, and birthmarks. Be alert to changes in the number, size, shape, or color of spots on your skin. The best way to do this is to examine your skin. It may also be helpful to have someone else who can check your back. Call your doctor if you find any new or changing skin growths.

**Examining Your Skin**

The best time to do this simple monthly exam is after a bath or shower. Use a full-length and a hand mirror so you can check any moles, blemishes, or birthmarks from the top of your head to your toes, noting anything new – a new skin growth or a change in size, shape, or color of an existing mole, or a sore that does not heal.

**Face the mirror:**

1. Check your face, ears, neck, chest, and belly.
2. Check both sides of your arms, the tops and palms of your hands, and your nails.

Sit down:

3. Check the front of your thighs, shins, the tops of your feet, in between your toes, and your toenails.

4. Now look at the bottom of your feet, your calves, and the backs of your thighs.

*Use a hand mirror for the backs of your thighs.*
5. Use the hand mirror to check the buttocks, genital area, lower and upper back, and the back of your neck.

It may be helpful to look at your back in a wall mirror by using the hand mirror.

Stand up:

If you do the exam regularly, you will know what is normal for you. Remember the warning signs and check with your dermatologist or other health care professional if you find something new or different.
The American Cancer Society is the nationwide community-based voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives, and diminishing suffering from cancer, through research, education, advocacy, and service.

No matter who you are, we can help. Contact us anytime, day or night, for information and support.