

## Prevention and Detection of Skin Cancer



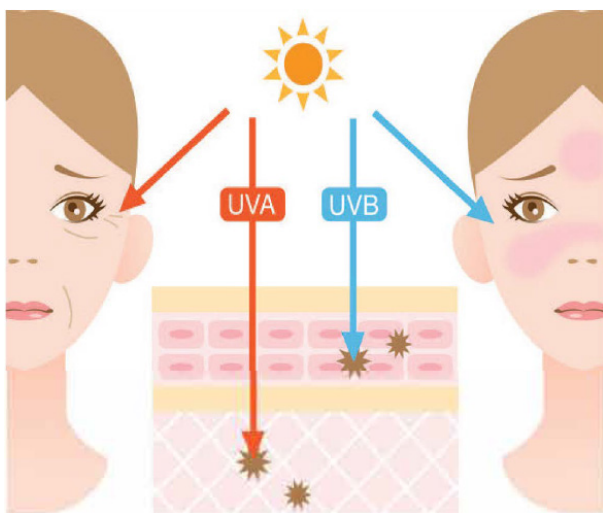
### What Is Skin Cancer?

Skin Cancer typically occurs when the DNA of your skin gets damaged. The damage causes your DNA to repair itself which can result in a mistake with the DNA sequence and cause abnormal cell growth. This abnormal cell re-growth can turn into precancerous lesions or a skin cancer. The majority of skin damage is caused by over exposure to ultraviolet light, however, there can be other factors that can increase your personal risk of developing skin cancer.

According to the American Academy of Dermatology, an estimated 9,500 people are diagnosed with skin cancer every day in the United States and on average two people die every hour from skin cancer, usually melanoma. Skin cancer is one of the most preventable types of cancer and sun protection is essential.

### Common Risk Factors for Skin Cancer

- History of multiple sunburns
- Family history of Melanoma (1st degree relative)
- Age, as you get older the risk of getting skin cancer increases
- Birth Sex: Men are 2-3 times more likely to develop a form of skin cancer than women
- Skin that burns easily
- Blonde or red hair
- Excess sun exposure and/or use of tanning bed
- Immunosuppression or immunocompromised
- Certain individuals with more than 50 atypical nevi/ moles.
- Rare genetic conditions such as Lynch syndrome or Muir-Torre syndrome



### Sun Fun Facts!

The sun produces both UVA and UVB rays which are both damaging to the skin.

UVA rays, “aging rays” cause premature aging of the skin by breaking down collagen which causes wrinkles and age spots. The UVA rays can pass through window glass and cause DNA damage.

UVB ray, “burning rays,” are the main cause of sun burns. Both UVA and UVB rays cause permanent damage to the skin and collagen. Every sunburn increases your chance of developing a skin cancer. Sun damage also increases the production of melanin in attempts to protect your skin from further damage. However, a “tan” is also damage to the DNA.

*The information provided in this document is for general information purposes only and is not intended to be medical advice or substitute for professional healthcare.*

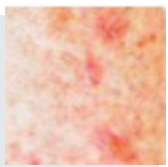


## COMMON SKIN CANCERS & PRECANCEROUS GROWTHS



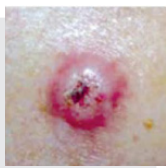
### Seborrheic Keratosis (SK)

A common non-cancerous skin growth. These growths are warty appearing, scaly, and rough, ranging in size and color.



### Actinic Keratosis (AK)

A pre-cancerous pink scaly patch that usually develops in multiple places. These growths can turn into Squamous Cell Carcinoma.



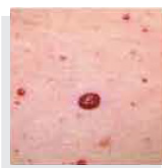
### Basal Cell Carcinoma (BCC)

A cancerous papule that grows on the most exposed parts of your body. These growths are the most common form of cancer. They often have a pearly appearance and may bleed on their own. They can also appear as a pink scaly patch.



### Squamous Cell Carcinoma (SCC)

A cancerous growth in the form of scaly patches, firm red bumps, or a non-healing sore. These growths are the second most common form of skin cancer.



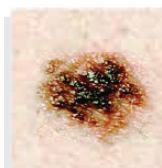
### Cherry Angioma

A non-cancerous round or oval skin growth made up of blood vessels that appear bright red.



### Nevus

A non-cancerous pigmented mole that could be flat or raised.



### Dysplastic Nevus

A non-cancerous abnormal looking mole. These moles tend to resemble melanoma. Dysplastic nevi can also be considered pre-melanotic, and if left untreated may turn into a melanoma. Some people have many "clinically" dysplastic nevi that can usually just be watched for changes.



### Congenital Nevus

A non-cancerous pigmented birthmark that could be flat or raised. Also known as a mole.



### Melanoma

A cancerous skin growth taking on the form of a mole, brown spot, or abnormal growth. This is the most dangerous form of skin cancer.

- The most common type of cancer is skin cancer
- The most common type of skin cancer is basal cell carcinoma
- The second most common is squamous cell carcinoma
- The third most common type is melanoma
- People also grow atypical (or pre-cancerous moles) and actinic keratoses (pre-squamous cell) which can be treated before they become skin cancers
- There are other very rare types of skin cancers
- Skin cancer, when detected early, is almost always curable

## Prevention and Detection of Skin Cancer



### HOW TO PREVENT SKIN CANCER

Participating in outdoor activities is important to remain healthy, but it's even more important to remember to protect your skin. Protection from excessive sun exposure is the most effective way to prevent skin cancer.

#### Choosing The Correct Sunscreen

Choosing a broad spectrum sunscreen or a mineral based sunscreen will block both UVA and UVB rays.

**SPF (sun protection factor)** in sunscreen is important it is recommended to wear **SPF 30 daily** or an SPF of 45 if you are outside for long periods of time.

A mineral based sunscreen is currently the safest option.

A recent review by the FDA proposed that **zinc oxide** and **titanium dioxide** are the only ingredients classified as “generally recognized as safe and effective” (GRASE). There are typically 14 other ingredients in sunscreen and the FDA wants more data on the safety and effectiveness of 12: **ensulizole, octisalate, homosalate, oxyacetylene, octinoxate, oxybenzone, avobenzene, cinoxate, dioxybenzone, merdiamate, padimate O, sulisobenzene**. The FDA has proposed that the final two ingredients be labeled as not GRASE (**PABA and Trolamine Salicylate**).

**Environmental considerations: Reef Safe** - To save our oceans' coral reefs, people may want to consider mineral-based (non-nanoparticle zinc or titanium) reef safe sunscreens.

**The following ingredients are NOT reef safe:**

Oxybenzone, Octinoxate, Octocrylene, Homosalate, 4-methylbenzylidene camphor, PABA, Parabens, Triclosan. Any nanoparticles or “nano-sized” zinc or titanium (if it doesn't explicitly say “micro-sized” or “non-nano” and it can rub in, it's Probably nano-sized), and any form of micro plastic, such as “exfoliating beads” are not reef safe.

Clothing with Ultraviolet Protection Factor, or UPF, can also be worn and blocks 98% of harmful rays.

#### Things to Know

- Apply sunscreen 30 minutes prior to sun exposure
- Remember to re-apply, especially if sweating/playing sports, or outside for longer than 2-3 hours
- Up to 80% of rays pass through the clouds so wear sunscreen every day
- Seek shade between 10 am and 4 pm
- Avoid tanning beds/ booths
- Recommend a total body skin exam once a year by a professional




Prevention and Detection of  
**Skin Cancer**



## PERFORM A SELF SKIN EXAM AT HOME MONTHLY

Look at your skin once a month from you scalp to toes. If you notice any lesion or growth that is new, changing, bleeding, itching, not healing, or if you are just concerned, make an appointment.

**1 in 5**   
Americans will be diagnosed with skin cancer in their lifetime.

Here is an easy process to follow to help ensure you examine your entire body. Using a hand mirror and/ or assistant, examine:

- The front, back, and sides of your body
- Lower back and buttocks
- The back of your neck and scalp. Be sure to part your hair to better view your scalp
- Arms, elbows, and hands, including palms and between fingers

### What Are You Looking For?

The deadliest form of skin cancer is melanoma. When detected early, melanoma can be treated effectively. Some of the warning signs for melanoma, also known as the **ABCDEs of melanoma**, are:



**A. ASYMMETRY**

One half is unlike the other.



**B. BORDER**

Irregular, scalloped or poorly defined border.



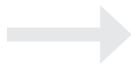
**C. COLOR**

Varies from one area to another.



**D. DIAMETER**

Melanomas are usually greater than 1/4 inch in size when diagnosed. They can be smaller.



**E. EVOLVING**

Over time a mole or lesion that changes in size, shape or color.

*If you find any of these warning signs or something you are unsure of, contact your healthcare professional.*