

# Skin Cancer Due to Sun Exposure Meeting Kit



## SKIN CONDITIONS CAUSED BY SUN EXPOSURE

There are many effects the sun has on our skin. A little bit of exposure can help us get vitamin D which is a good thing; most effects from sun exposure are not good however. Some skin conditions caused by sun exposure include wrinkles, freckles, discolored skin, benign tumors, and skin cancer.

### WHAT IS SKIN CANCER?

Skin cancer is the most common form of cancer in the US, and the number of cases continues to rise. It is the uncontrolled growth of abnormal skin cells. While healthy cells grow and divide in an orderly way, cancer cells grow and divide in a rapid, haphazard manner. This rapid growth results in tumors that are either benign (noncancerous) or malignant (cancerous).

## HARMS/DANGERS OF SUNLIGHT

### Amount of Exposure to Sunlight

The damaging effects of ultraviolet radiation accumulate over the years. In general, the risk of developing skin cancer increases with the amount of time spent under the sun and the intensity of radiation. The intensity of radiation varies according to the season of the year, time of day, geographic location (latitude), elevation above sea level, reflection from surfaces (e.g., white sand or concrete, water, snow), stratospheric ozone, clouds, and air pollution.

Recent studies have focused on the effects of intermittent (short-term, occasional) sun exposure in comparison to chronic (long-term) exposure. It appears that the type of exposure may influence the type of cancer that develops. For example, intermittent solar exposure may be an important factor leading to the onset of basal cell carcinoma of the skin. Childhood sun exposure may also play an important part in the development of these cancers later in adult life. The pattern for cutaneous melanoma is similar to that for basal cell carcinoma.

### Understanding UV index

You might see ratings from the UV index on weather reports. The numbers represent the risk of unprotected sun exposure to the average person. You may think that the lower

index numbers mean you do not have to take action, but the risk of sun exposure to unprotected skin always exists. You might also think that cloudy days mean you can spend unlimited time in the sun, but this is not true.

### **0-2: Low**

At the low stage, experts advise you to wear sunglasses if the sun is bright. Use sunscreen and protective clothing if you burn easily.

### **3-5: Moderate**

At the moderate stage, you should cover up and use sunscreen. Avoid direct sunlight at midday, when the sun is most powerful. Stay in the shade.

### **6-7: High**

At the high stage, you should use all protections against sun damage (protective clothing, wearing a hat and sunglasses, using sunscreen). Limit time in the sun from 10 am to 4 pm.

### **8-10: Very high**

At the very high stage, you should be extra careful, using clothing, hats, sunscreen and sunglasses. Avoid the sun between 10 am and 4 pm. Your skin can burn quickly at this stage and will be injured.

### **11 or higher (11+): Extreme**

At the extreme stage, you should use all methods of prevention. It will only take minutes of exposure to result in a burn. Do not go out in the sun from 10 am to 4 pm. Wear protective clothing, a hat, sunglasses and sunscreen. At this stage and all others, remember that snow, sand, and water all increase UV exposure by reflecting the sun's rays.

## **BEST PRACTICES TO AVOID SKIN CANCER**

- The best thing to do is to avoid excessive exposure to the sun and tanning beds altogether.
- Wear sun screen to protect your skin from UV rays. SPF 30 will protect you from UVB rays and zinc oxide will protect you from UVA rays. Make sure to reapply it frequently when swimming or sweating.
- The majority of our exposure to the sun in our lifetime occurs during childhood. While it may be too late to worry about whether you had adequate protection when you were a kid, it is not too late to protect your kids or other young family members from being over exposed to the sun.

### **Maintaining Healthy Skin**

- Stop smoking: People who smoke tend to have more wrinkles than nonsmokers of the same age, complexion, and history of sun exposure. The reason for this difference is unclear. It may be because smoking interferes with normal blood flow in the skin.
- Apply sunscreen with a sun protection factor (SPF) of 30 or greater 30 minutes before sun exposure and then every 2 to 3 hours thereafter. Reapply sooner if you get wet or perspire significantly.
- Select cosmetic products and contact lenses that offer UV protection.
- Wear sunglasses with total UV protection.
- Avoid direct sun exposure as much as possible during peak UV radiation hours

between 10 am and 4 pm.

- Perform skin self-exams regularly to become familiar with existing growths and to notice any changes or new growths.
- Relieve dry skin using a humidifier at home, bathing with soap less often (instead, use a moisturizing body wash), and using a moisturizing lotion.
- Become a good role model and foster skin cancer prevention habits in your child. Eighty percent of a person's lifetime sun exposure is acquired before age 18.

## **FINAL WORD**

The sun light has a double curse. One hand, enables us as a planet to survive and flourish. It also has the power to destroy humans. How we manage this is a greatest test to our survival.