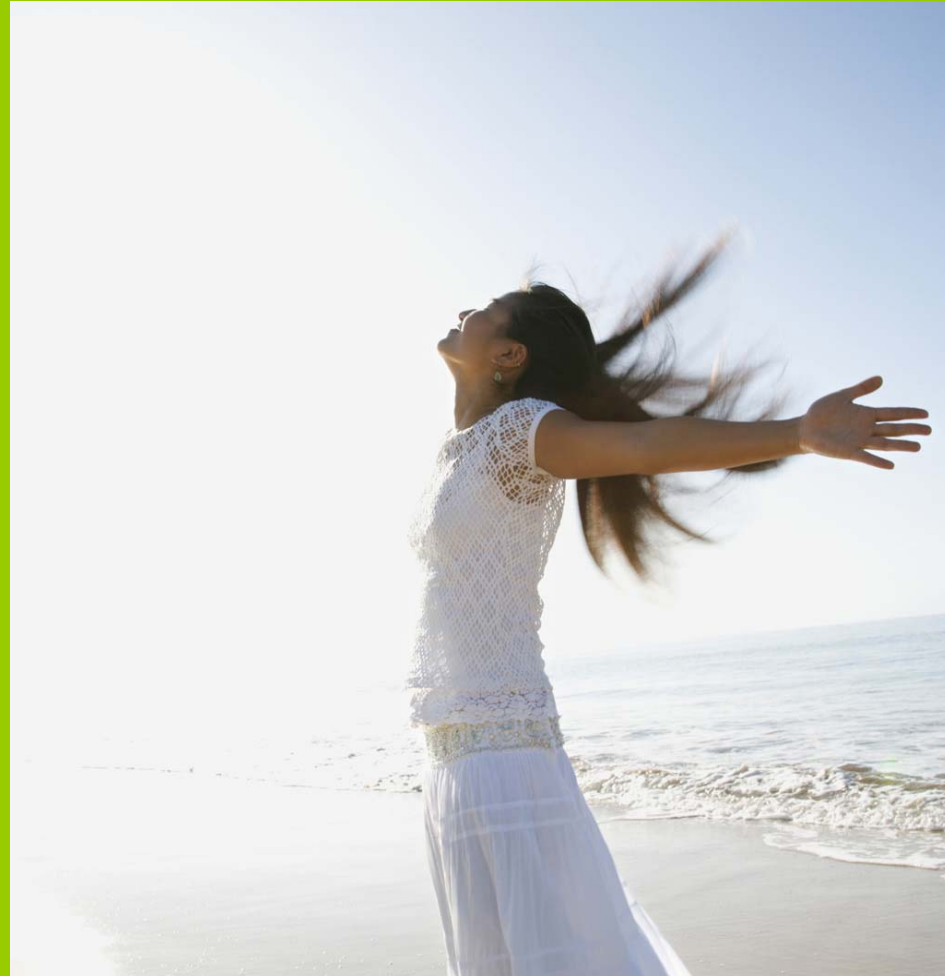


# SUN SAFETY 101

TIME TO  
ENJOY  
THE SUN

BUT DID  
YOU  
KNOW...

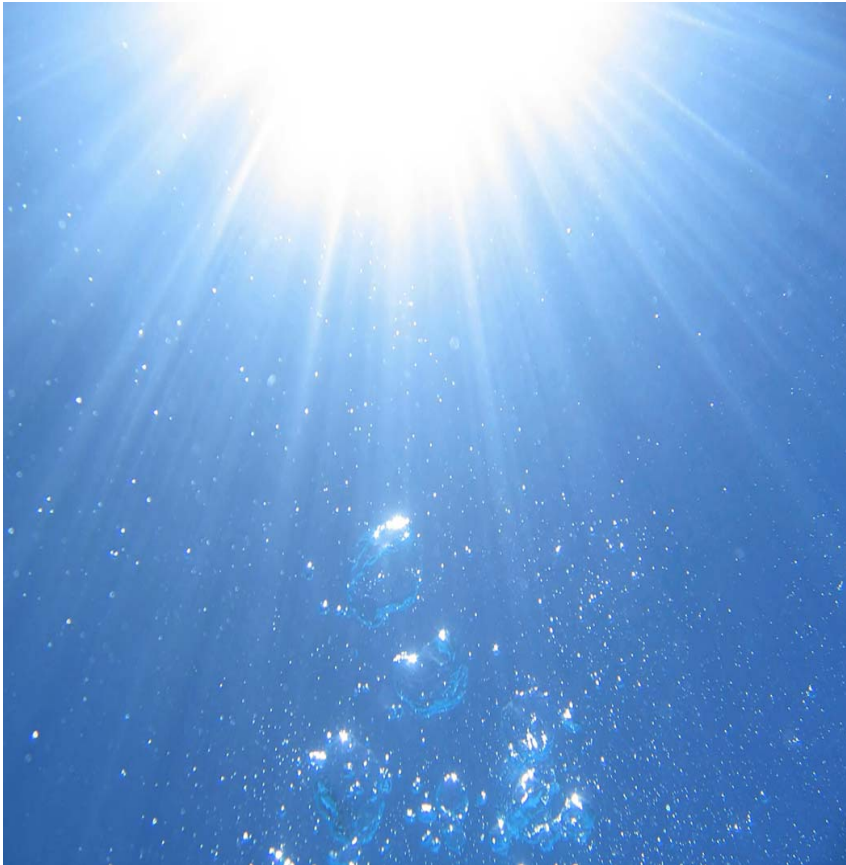


# Not So Fun Facts About Skin Cancer



- Most common cancer in US
- ↑ one million cases/yr
- Combine all breast, prostate, lung and colon cancer cases; still don't reach # skin cancer cases
- 1 in 5 people will get skin cancer in lifetime

# UNDERSTANDING THE SUN'S RAYS



- Radiation from sun's rays is a carcinogen (cancer causing substance)
- Radiation is cumulative
- Children are very susceptible to the damage of radiation
- 23% of lifetime exposure occurs before age 18 (not 80%)
- skin cancers associated with UV radiation from sun

# UVA RADIATION

- Penetrates deeper to the thickest layer of the skin (dermis)
- Suppresses immune system (which protects you from skin cancer and the spread of it)
- Premature aging/skin spots
- Excessive exposure leads to skin cancer



# UVB RADIATION



- Burning rays; cause of sunburn
- Blocked by window
- Excessive exposure leads to skin cancer

# Susceptible Skin Type

- People with (naturally) blond or red hair
- People who burn and develop freckles rather than tanning
- People with many moles
- Skin cancer much more common among whites than African Americans and Asian Americans
- Darker skin reduces skin cancer risk
- **However**, skin cancer can affect people of any race, even those with very dark skin, who may be susceptible to getting cancers on their palms, soles of feet, beneath fingernails, and on other less pigmented areas.

*American Cancer Society*

# Skin Cancer

- Two main types and several subtypes.

## **Malignant melanoma**

- Cancer of melanocytes (pigment-producing skin cells)
- Until age 39 women are almost twice as likely to develop melanoma than men
- 7x more common btwn ages 10-20, than it is btwn 0-10

## **Nonmelanoma skin cancer**

- Much more common
- Rarely fatal, but significant human and economic cost
- Basal cell carcinoma (BCC): most common
- Squamous cell carcinoma (SCC): less common

*Skin Cancer Facts, March 2010 Update*



# Body Mole Map

Follow these instructions regularly for a thorough skin-exam:  
 1. Examine your skin, 2. Know your spots, 3. Record your spots so you can refer back during your next exam!

see SPOT  
 check SPOT

SAFER & LIFE | American Academy of Dermatology

## 2 The ABCDEs of Melanoma

Skin cancer can develop anywhere on the skin. Ask someone for help when checking your skin, especially in hard to see places. If you notice a mole that is different from others, or that changes, itches or bleeds (even if it is small), you should see a dermatologist.



**A** Asymmetry  
 One half unlike the other half.



**B** Border  
 Irregular, scalloped or poorly defined border.



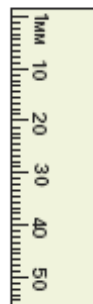
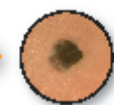
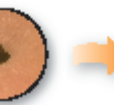
**C** Color  
 Varied from one area to another; shades of tan and brown, black; sometimes white, red or blue.



**D** Diameter  
 While melanomas are usually greater than 6mm (the size of a pencil eraser) when diagnosed, they can be smaller.



**E** Evolving  
 A mole or skin lesion that looks different from the rest or is changing in size, shape or color.



## 3



MOLE #	<b>A</b> Asymmetrical? Shape of Mole	<b>B</b> Type of Border?	<b>C</b> Color of mole	<b>D</b> Diameter/Size of Mole. Use ruler provided.	<b>E</b> How has mole changed?

## 1 Skin Cancer Self-Examination

### How to check your spots:

Checking your skin means taking note of all the spots on your body, from moles to freckles to age spots. Remember, some moles are black, red, or even blue. If you see any kind of change on one of your spots, you should have a dermatologist check it out.



**1** Examine body front and back in mirror, then right and left sides, arms raised.



**2** Bend elbows, look carefully at forearms, back of upper arms, and palms.



**3** Look at backs of legs and feet, spaces between toes, and soles.



**4** Examine back of neck and scalp with a hand mirror. Part hair and lift.



**5** Finally, check back and buttocks with a hand mirror.

# Look for Shade in the Middle of the Day!

- Plan activities to avoid midday summer sun.
- UV most exposure intense between 10 and 4 and when your shadow is shorter than you.
- If you are going to be outside in bright sunlight, plan to have a shady place to stay. Even in the shade, beware of reflected light from sand, pavement, water, snow, etc.
- Water doesn't provide shade even though you may feel cool! UV can penetrate > 3 ft. of water.

*American Cancer Society*

# Reflection



- 25% of the sun's rays are reflected back from sand
- 80% of the sun's rays are reflected back from the snow
- 80% of the sun's rays come through on a cloudy day!

# ACS Skin Cancer Prevention Message Slip! Slap! Slop! Wrap!

- Slip on a shirt!
- Slap on a hat!
- Slop on sunscreen!
- Wrap on sunglasses!



**SLOP!**



**SLAP!**

# Slip on a Shirt!

- Wear a shirt and other sun-blocking clothing.
- Dark color fabrics block more UV than light ones.
- A tight weave is more effective than loosely woven fabrics. Stretching widens holes in the weave and lets more UV through, so loosely-fitting clothing is best.
- Wet fabrics are less effective in blocking UV.
- A thin, wet, white tee shirt is not very effective, and is equivalent to SPF of 7-8.

*American Cancer Society*

# Slap on a Hat!

- Wear a wide-brimmed hat or a sun-protective cap with a brim and flaps to cover the neck and ears. A 4 inch brim blocks 70% of head and neck sun exposure.
- Baseball caps are the worst -- loose weave, no ear protection, no neck protection if worn forwards, no face protection if worn backwards.
- Sombreros and cowboy hats are the best.

*American Cancer Society*

# Recipe for Sunscreen

- 1 ounce
- SPF 15 or ↑



Apply liberally 20  
minutes prior to sun  
exposure

Rub in thoroughly

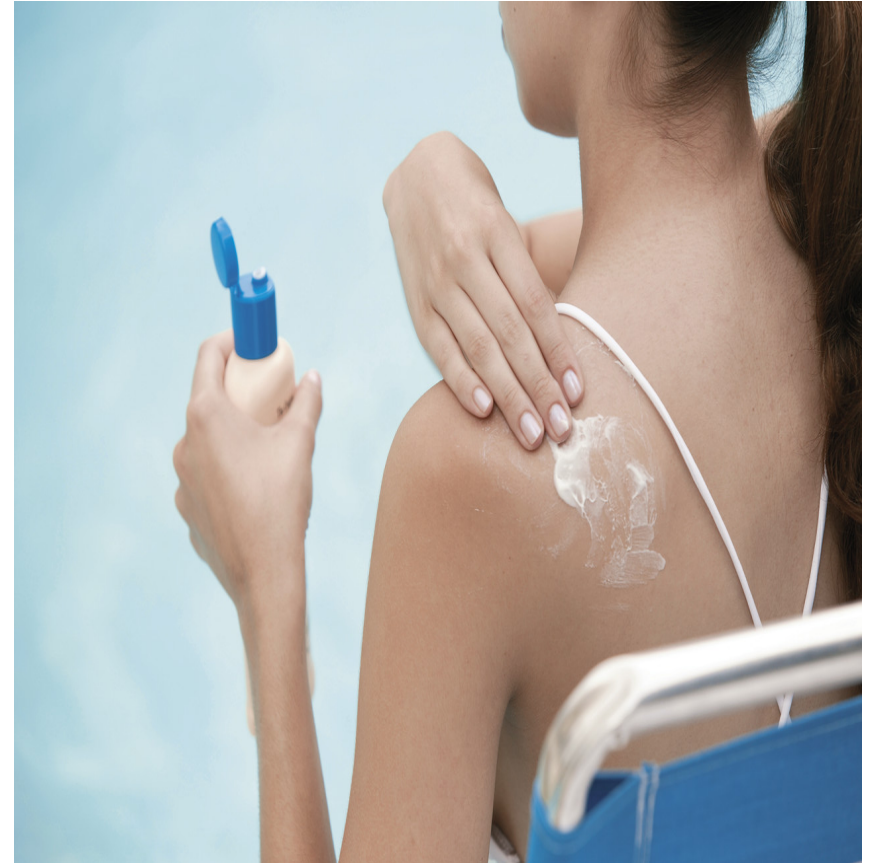
Reapply every 2 hours  
and after swimming or  
perspiring

# How Sunscreen Works

- Look for UVA+UVB protection
- Look for AAD Seal of Recognition

[www.aad.org](http://www.aad.org)

- Lose effectiveness after 40 minutes in water
  - Bottle good for 3 years
- \*FDA requirement - must be stable at original strength x 3 yrs



# SPF – What Does it Mean?



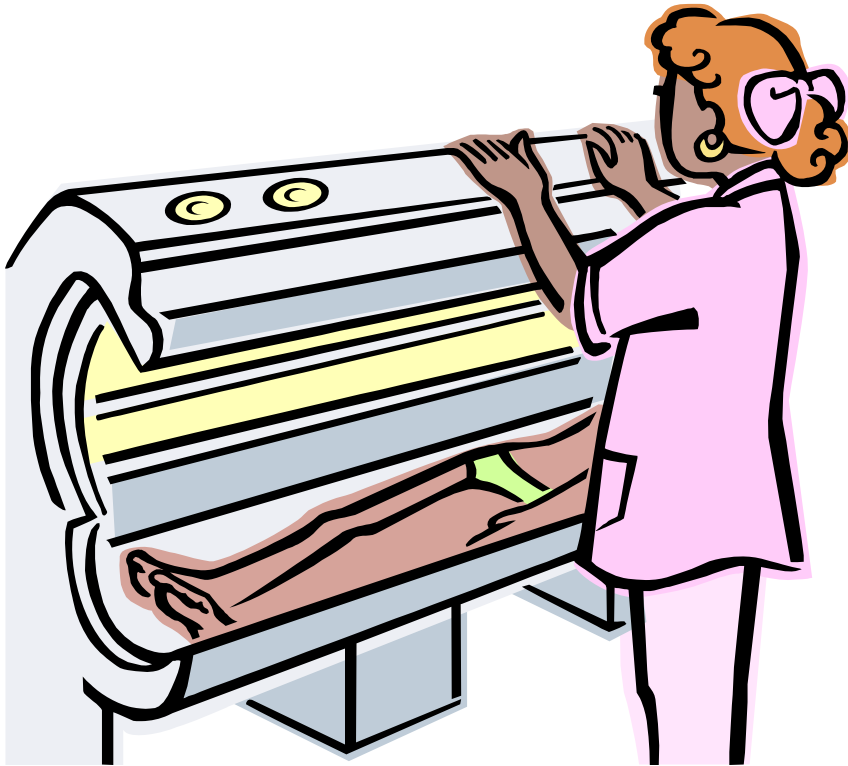
- How slow do you burn?
- Still need to follow other sun safety precautions – seek shade, protect against reflection, check your skin annually

# Wrap on Sunglasses!

- Wear sunglasses that block UVA and UVB to protect skin around the eyes from cancer and photo aging (skin wrinkles).
- Inexpensive children's' sunglasses may not block UV -- check the label.
- UV light also promotes cataract formation and some other eye diseases.

*American Cancer Society*

# One Last Word About Tanning Beds



**The United States Dept of HHS has declared ultraviolet radiation from the sun and artificial sources, such as tanning beds and sun lamps, as a known carcinogen (cancer causing substance).**

*Report on Carcinogens, Eleventh Edition (Ultraviolet Radiation Related Exposures); U.S. Dept. HHS, Public Health Service, National Toxicology Program*

# Indoor Tanning Facts

- Frequent tanners (using new high pressure sunlamps) receive 12x the radiation (UVA) dose received from sun
- Almost 30 million people tan indoors each yr; 2.3 million of them are teens
- 71% of tanning salon patrons are females ages 16-29
- Tanning bed users are 2.5x more likely to develop basal cell carcinoma
- Indoor tanning industry makes an estimated 5 BILLION dollars per year!

# Dermascan™



- Using DERMASCAN™, blacklight technology reveals sun damage not seen by the naked eye