



Lifeguard Safety

On The Beach



Valerie Smith, MS
Wellness Director, ACM JIF



Sun Dangers For Lifeguards



- * **Suntan** - A tan may look nice, but that golden color is due to an injury to the top layer of your skin.
 - * When exposed to UV light, your body protects itself by accelerating the production of melanin, but the protection only goes so far.
 - * Extra melanin creates the darker color of tan. Many people simply don't produce enough melanin to protect the skin well. Eventually UV light causes the skin to burn, bringing pain, redness, and swelling.
- * **Sunburn** - Caused by exposure to too much UV light.
 - * Ultra Violet A and Ultra Violet B are the two types of solar radiation most responsible for sunburn
 - * Snow, ice, water, and sand can also reflect UV rays, burning your skin as severely as direct sunlight.
 - * It's called a first degree burn when it only affects the outer layer of your skin.
- * **Melanin** is the pigment in the outer layer of skin that gives your skin its normal color. Dark skinned people have more melanin in their skin than light skinned people.
 - * Extensive exposure to UV rays in sunlight leads to premature aging, skin damage, skin cancer, and eye damage.
 - * Having more than 5 sunburns at any age doubles the risk for Melanoma.
 - * On cool, hazy, or cloudy days 80% of UV rays pass through the clouds.
- * **Skin Cancer** - is the most common cancer in the United States. Over the past three decades, more people have had skin cancer than all the other cancers combined.
 - * The most preventable cause of skin cancer is exposure to UV light either from the sun, or artificial sources like tanning beds.
 - * Teenagers and young adults who are lifeguards are at the highest risk for skin cancer because of poor sunscreen habits when compared to adults.
 - * According to the International Life Saving Federation, Lifeguarding is considered a very high risk occupation for skin cancer.

Sun Dangers For Lifeguards



- * **Melanoma**- is the most serious form of skin cancer
- * It begins in the cells in the skin called melanocytes (cells that produce pigment that cause your skin to tan).
- * Is the leading cause of death from skin disease. Accounts for 1% of skin cancer rates and 9000 deaths per year.
- * Regular daily use of an SPF 15 or higher reduces the risk of developing melanoma by 50%

- * The most common types of skin cancers are:
- * **Basal and Squamous cell** - These cancers are often found in areas exposed to the sun, they are very common but are very treatable. Basal is most common, grows slowly and rarely metastasizes.

* Indicators of skin cancer:

- * Irregular borders on moles
- * Moles that aren't symmetrical
- * Colors that aren't uniform throughout
- * Moles that are bigger than a pencil eraser
- * Itchy or painful moles
- * New moles
- * Sores that bleed and don't heal
- * Red patches or lumps

CASE STUDY

* Daytona Beach Survey-

- * 200 current & former lifeguards over previous 30 years, nearly 40% contracted some form of skin cancer - ranging from mild conditions to malignant tumors.
- * The national rate for skin cancer in 1996 was 20% or 1 out of 5 persons, and they were primarily in their 60s. The rate of skin cancer in this survey was double at 40%.

Sun Protection

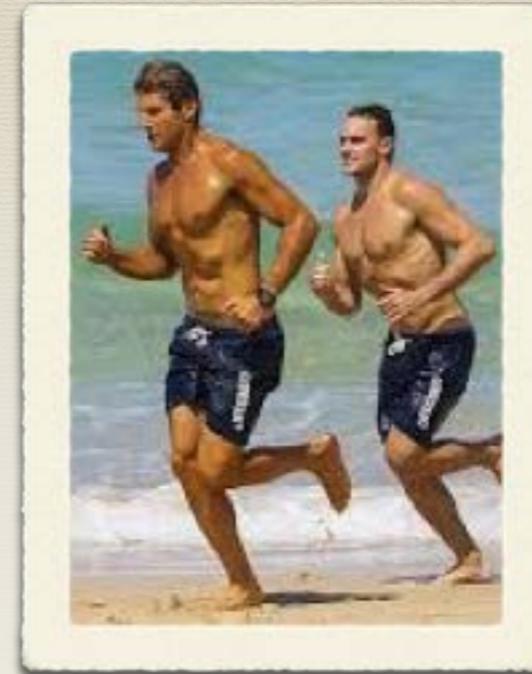


- * Wear a hat with a wide brim, to shade the face and neck, but does not reduce your visibility
- * • Wear broad spectrum (UVA and UVB) protective sunglasses
- * • Apply a daily broad-spectrum with SPF 30. Apply 20 minutes before going outdoors and reapply every two hours or immediately after swimming or sweating.
- * • Seek shade during your breaks, when possible, but especially between 11 a.m. and 4 p.m., when the intensity of the sun's UV rays is greatest.



Beach Workouts & Injuries

- Running on sand requires 1.15 times as much mechanical work and 1.6 times as much energy expenditure than running on a hard surface at the same speed. So for a high intensity sprint workout or for a cardio workout, with more bang for your buck, sand running is a good idea, but according to Dr. Peter Wernicki, orthopedic surgeon, there are some drawbacks.
- Running on sand causes your heel to sink in deeper, causing extra stress on the back of the foot and leg. Common injuries include:
 - **Plantar fasciitis**- plantar fascia flat band of tissue that connects heel band to your toes. Plantar fasciitis is caused by straining the ligament that supports your arch and can lead to pain and swelling
 - **Achilles tendonitis**- an overuse injury of the achilles tendon that connects calf muscle at the back of your lower leg to the heel bone. **Most commonly occurs in runners who have suddenly increased the duration or intensity of their runs.**
 - **Torn muscles in the calf** - usually these tears happen during a sudden muscular contraction during a sport, running and jumping.
 - **Bare Feet** - potential to injure yourself on shells, rocks, and other debris on the beach.
 - A study has shown that the foot is the most commonly injured body part for lifeguards. The shoulder is second.



Lifeguard Exercise Safety

- Try to vary workouts from day to day, not only to work different muscle groups but to avoid injuring yourself by overworking the same muscle groups.
- Run on the beach with shoes and run on the harder, wet sand
- Compound Exercises - upper body strength is important for lifeguards, a strong upper body needs to be balanced by a strong core and lower body. Compound exercises train more than one muscle group at a time:
 - Push ups & Planks - target the back, chest, shoulders, glutes, abdominals and quads.
 - Tricep dips, pull ups, and dead lifts: most of these exercises use body weight for resistance and can be done in the sand.
- Warm up:
 - To raise body temp, increase heart rate etc. Mobility exercises are ideal
 - jogging, skipping, rowing, cycling.
 - Roll it Out - Massage tools such as foam roller, The Stick, and tennis ball are good
 - Goal - move joints and limbs through range of motion to be used.
 - 10 - 15 minute warm up is ideal!



Questions?



Thank You!

Valerie Smith, M.S.

acmjifwellness@gmail.com

609-251-7811