



World Water Safety

## INTERNATIONAL LIFE SAVING FEDERATION

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### MEDICAL POSITION STATEMENT - MPS 02

## SUN DANGERS FOR LIFEGUARDS

**NOTE:** This statement is intended for those lifeguards, acting in a professional or volunteer capacity, who are trained in the techniques of water rescue and resuscitation and who assume a duty to safeguard members of the public at aquatic sites. They may be called lifeguards, lifesavers or both. This statement is not directed at members of the public trained in water safety and rescue techniques, but without a duty to respond, who may also be known, in some areas of the world, as lifesavers.

### BACKGROUND

The nature of the profession of surf, pool and open water lifesaving requires significant time outdoors. This leads to exposure to the elements, which includes sunlight. Extensive exposure to the ultraviolet (UV) rays in sunlight leads to premature aging, skin damage, skin cancer, eye damage, and immune system suppression. This risk is significantly increased in fair skinned individuals, those who have suffered severe sunburn in early childhood, or those with previous skin diseases or previous skin cancer. Both cumulative exposure (without sunburn) and repeated sunburn increase the risks.

Skin cancer is the most common of all cancers and can be deadly. Skin cancer can be divided into two main groups: non-melanoma skin cancers, which includes squamous cell carcinoma and basal cell carcinoma; and melanoma skin cancer, which is the most aggressive. The three main types are squamous cell carcinoma, basal cell carcinoma, and the most aggressive type, melanoma. The prevalence of skin cancer increases with sun exposure, burning or tanning – particularly during childhood. It is estimated that 90 percent of non-melanoma skin cancers, and 65 percent of melanoma skin cancers are associated with exposure to ultraviolet radiation from the sun.

Skin cancer is largely preventable through a broad sun protection programme. Ninety-five percent of skin cancer can be cured if detected early. Therefore, individuals such as

lifeguards who have significant sun exposure should have regular screening for skin cancer, at least once per year by a dermatologist or similar professional.

A qualified physician should evaluate new moles, changing moles, or scaly, crusty, raised skin lesions. Enlargement, notching, itching, bleeding or colour change in a pre-existing mole is a warning sign.

Avoidance of sun exposure especially important during peak times of the day to reduce skin damage and cancer risk. This can be accomplished by appropriate shelter at guard stations, tightly woven long sleeve clothing, wide brimmed hats, and frequent and thorough use of water resistant sunscreen. Sunscreen should be a minimum SPF 30 (or greater) and broad-spectrum (providing protection from both UVA and UVB rays). It should be applied 20 (15 to 30) minutes prior to sun exposure and should be used even on cloudy days as UV light penetrates clouds and causes skin burning. Sunscreen should be applied with extra care to the lips, ears, nose, shoulders, head, as well as hands and feet. It should be re-applied every 2 (– 3) hours or more often if swimming, or sweating profusely. The use of sunscreen has been shown to reduce the incidence of melanoma but it should be used in addition to avoidance of sun exposure.

Lifeguards and other personnel who experience significant skin damage or cancer, may not in some instances be able to continue employment in outdoor activities, and should be advised against it. This situation may have a substantial financial impact on the individual and the organization, yet alternative arrangements should be made to accommodate the individual, if possible.

The UV rays in sunlight can also seriously damage the eyes. UV exposure increases the risk of developing certain types of cataracts, macular degeneration, corneal damage, and pterygiums - which are all conditions that impair eyesight. Any changes in the appearance of an eye or any vision changes must be checked by an ophthalmologist.

Eye protection should consist of good quality sunglasses in addition to shade and hats. Sunglasses should offer 99 - 100% protection from UVA and UVB light as well as screening out 75 - 95% of the visible light. They should be breakage resistant with brown, grey, green, or amber lenses. Wraparound style and polarization are advised to help reduce glare and eye fatigue, but must not obstruct peripheral vision.

## **STATEMENT**

1. Lifeguarding is a high-risk occupation for the development of skin cancer due to extensive sun exposure. All professional and volunteer lifeguard organizations should have mandatory sun protection policies. These policies should include:
  - A. Appropriate education on the dangers of sun exposure, with implementation of a broad sun protection programme.
  - B. Mandatory requirements for the use of wide brim hats, tightly-woven UPF 50+ rated long sleeved protective clothing with high neck collars, and adequate natural or artificial shade for all personnel on duty.
  - C. The mandatory provision of minimum SPF 30 broad-spectrum (providing both UVA and UVB ray protection) sunscreen, used correctly and generously applied.

- D. Mandatory use (even on cloudy days) of quality 100% UV protection sunglasses with side protection, which does not obscure peripheral vision.
  - E. Yearly skin cancer checks and eye exams for all employees.
2. All lifeguard agencies are encouraged to support their employees in obtaining qualified physician evaluation of any suspicious skin lesions, treatment of such lesions, and employment modification as necessary.
  3. All lifeguards and lifeguard organizations should be at the forefront of public education on the dangers of sun exposure and skin cancer, and involved in implementing or abiding to a broad sun protection programme. They should be instructive in the avoidance of sun damage including the use of clothing, sunscreen, hats and sunglasses and promote these principles by example.

## LEVEL OF EVIDENCE

This document is based on expert consensus.

## POTENTIAL CONFLICT OF INTEREST STATEMENT:

None of the participants in the consensus process leading to this position statement has a conflict of interest with the stakeholder industry, technology, persons or organizations that are identified and/or impacted by the position statement.

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## APPROVAL

Medical Position Statement approved by the ILS Board of Directors on 26/09/1998 and 03/09/2016.