

ISSUE 32 | JUNE 2009

the crew

www.yotcru.com

REPORT



Sun Sense



Being in the sun all day is part of crew life. Most of us are aware of the lifelong damage we are doing without protection but suntans remain fashionable despite this. Robb Leigh MD reminds us of why it is so important to slip, slop and slap.

While many think that a good suntan or mild sunburn results in a healthy glow, sunlight can actually be more harmful than beneficial to the skin and the immune system. For starters, chronic sun exposure can cause cosmetic problems such as wrinkling, age spots, freckles and leathery skin. Even more alarming, though, is its connection to skin cancer.

It is estimated that we get about 80 per cent of our total lifetime sun exposure in the first 18 years of life, making sun protection paramount during infancy/childhood and even throughout adult life. What is more, individuals with lighter skin colour are more susceptible to the damaging effects of sunlight and must exercise extreme caution when exposed to the sun.

Skin cancer

The incidence of skin cancer has been on the rise due to increased exposure to sunlight in recent years. There are three types of skin cancer associated with sun exposure:

- **Basal cell skin cancers** – the least aggressive, usually take years to develop and rarely spread to other parts of the body.
- **Squamous cell skin cancers** – take years to develop, but may spread to other parts of the body.
- **Melanoma** – very invasive and easily spreads to other body parts; can be fatal if diagnosis is delayed or untreated, and can develop at any age.

Ultraviolet (UV) rays

UV rays (A and B) cause visible and invisible damage. Visible damage is sunburn, which can happen within as little as ten minutes of sun exposure for light-skinned individuals during the peak hours (10am – 4pm). The sun's energy is greatest at midday, closer to the equator, in the mountains and in the summer. Additionally, the sun's damaging effects are increased by reflection from water, white sand and snow. Invisible damage

consists of changes in the molecular structure of skin cells, which can lead to skin cancer.

UVA has deeper penetration and is thought to be related to the development of melanoma. It penetrates through window glass and is the main UV light emitted by sunlamps and tanning beds. UVB, on the other hand, is mostly responsible for sunburn and is blocked by window glass.

Tips for minimising sun exposure

- Be aware of the length of time you are in the sun, avoiding long periods of direct exposure.
- Wear protective covering, such as broad-brimmed hats, long trousers, long-sleeved shirts and sunglasses that provide 100 per cent UV ray protection.
- Use sunscreen, reapplying every two hours – or more often if engaging in water activities or if heavy sweating is anticipated.
- Choose a sunscreen that protects against both UVA and UVB. The higher the SPF (Sun Protection Factor), the longer the protection, and the lighter the skin, the more protection that is necessary.
- Note that insect repellents decrease sunscreen's potency by about 30 per cent, so if used together, a higher SPF sunscreen will be necessary.
- Keep infants under six months of age out of direct sun and covered by protective clothing or apply sunscreen if exposure is unavoidable. Sunscreen should be applied routinely beginning at six months of age. Apply generously all over exposed skin, and in particular the ears, lips and tops of feet.



Example of superficial spreading

In summary, exercise good judgment and consult your physician with questions – especially if you discover a new mole or an existing mole that changes in colour or size.

Image courtesy of Bigstockphoto.com

Ask the Doc

Q: What are the different types of diabetes?

A: There are three main types: type 1, type 2 and gestational.

> **Type 1** usually affects children and is due to insulin deficiency.

> **Type 2** is due to insulin resistance and manifests later in life. This can be hereditary.

> **Gestational diabetes** occurs in about four per cent of pregnancies worldwide, which resolves after delivery, but can present future risks.

Over 90 per cent of people with diabetes have type 2. Risk factors include obesity, age over 45, family history of gestational diabetes and sedentary lifestyle.

Diverse symptoms include excessive thirst or hunger, increased urination, weight loss, fatigue, nausea, blurred vision or dry mouth. Initial symptoms may be so mild and vague that people may attribute them to other causes, and the condition may go undiagnosed until more serious complications develop.

If you experience unusual symptoms – such as excessive thirst or urination – consult your physician.

Have a medical question? Email Dr Leigh at info@thecrewreport.com and his response to your question may appear in a future issue of TCR.

Super skin glue

Skin glue is super glue for the skin. Known chemically as 2-octylcyanoacrylate, it is marketed under various names, such as Dermabond® and SurgiSeal™. With minimal training, this product is easy to apply – much easier than suturing – and eliminates the need for numbing medicine and suture removal. Best suited for small, shallow, clean and dry lacerations, the dried glue peels off gradually over several days. It works most effectively on immobile areas of the body, where the glue is less apt to crack from repeated movement. Before using, remove debris and control bleeding, then dry and bring together the wound edges. Apply the glue in layers, after each dries. The long-term cosmetic results are comparable or superior to sutures. At approximately €38 (\$50) per unit, skin glue is non-toxic and safe for use, even around the eyes. Dry and durable within a few minutes, it is also waterproof – although swimming and bathing are not recommended (quick showers are acceptable).



Robb Leigh MD is a practising emergency physician and chief medical officer for MedAire Inc, working closely with the company's maritime clients to provide consistent and continuous case management oversight. www.MedAire.com