

## Of note

The amount of the sun's UV radiation that reaches us is dependent on time of day, season, latitude, and altitude. It increases with reflection (water surface, sand, and snow/ice) and can even be relevant under cloudy conditions. UV exposure in the tropics is generally higher due to latitude.

Sunburn is especially harmful to children and people with sensitive skin. In general, everyone is affected, even dark-skinned people (e.g. sun-induced eye damage!).

Repetitive UVB / UVA exposure damages skin, eyes, and the immune system (e.g., recurrent Herpes simplex triggered by UV-light) and in the long-term it can lead to premature skin aging, skin cancer and cataract.

Well-known short-term effects are sunburn, sunstroke and sun allergy:

- **Sunburn:** redness, swelling, pain and blistering of skin
- **Sunstroke:** headache, nausea, dehydration (sunstroke affects your body's ability to cool down to normal temperature). See also the factsheet "heat associated conditions"
- **Sun allergy:** itchy pimples 24 to 48 hours after exposure

Sun-induced skin lesions can be enhanced or triggered by the application of - or contact with - natural or chemical substances on the skin (e.g., lemon oil, certain plants) or medications, including antibiotics (e.g. doxycycline).

## Prevention

- Avoid the sun especially during 10 a.m. to 4 p.m., look out for shade!
- Clothing: long-sleeved shirts and pants, UV protection clothing (e.g., swimsuits), brimmed hats (to include neck, nose, and ears)
- Wear sunglasses with UV-protectant lenses
- Wear sunscreen labelled "broad - spectrum", "sun blocks" or "UVA/UVB with sun protection factor (SPF) of 30 or higher". Apply sunscreen before exposure and repeat regularly during the day to maintain protection, particularly if sweating or after swimming.
- Self-tanning products and pre-travel tanning are not recommended. They provide no or minimal sun protection and can even do harm.

## Treatment

- Sunburn treatment: symptom control, priority towards limiting further exposure!
- **Mild sunburn:** cool compresses, topical aloe-based gels, and topical calamine.
- **Severe sunburn and heat related symptoms:** rehydration + see Factsheet "Heat associated conditions".