

## **SOLARIUMS**

**There is no such thing as a safe tan** unless it's a fake tan out of a bottle or powder compact. Solariums are not safe tanning devices; research shows they increase your risk of skin cancer<sup>123</sup> and contribute to skin aging<sup>4</sup>.

If you use a solarium, you add to the UV dose you already receive from the sun. The link between skin cancer and UV exposure is quite simple: the more exposure you have to UV, the more chance you will develop skin cancer and the quicker your skin will prematurely age.

Around 80% of all cancers diagnosed are skin cancers, so it's not worth risking your health.

Solarium advertising claims the type of UV they use does not age the skin or cause skin cancer and is somehow safe. This is simply not true. There is no conclusive evidence to suggest that a solarium tan is "safer" than a suntan.

Solariums produce ultraviolet (UV) radiation, which is also produced by the sun and is responsible for skin cancer. The difference between the two is the specific type of UV that they produce and the quantities of each. Solariums usually claim to use mainly ultraviolet A (UVA) while the sun also produces mainly UVA it has slightly higher levels of ultraviolet B (UVB).

Until recently it was thought only UVB caused skin cancer. We now know that UVA and UVB play a part.

UVA penetrates the top layer of skin and causes damage to the lower layer. This causes skin to age prematurely. Other effects include roughening, blotchiness, wrinkling and general looseness<sup>5</sup>. High doses of UVA can also cause sunburn and contribute to skin cancer.

Compare the skin on the back of your hand with the inside of your thigh and you'll see what years of sun have done to your skin. The tan you develop in a solarium provides only limited protection from the harsh effects of the sun; it will not make it easier or safer to tan in the sun. If you sunburn easily and find it difficult to tan, you won't tan easily in a solarium either.

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<sup>1</sup> Autier P, Dore JF, Lejeune F, et al' Cutaneous malignant melanoma and exposure to sunlamps or sunbeds: an eortc multicenter case-control study in Belgium, France and Germany. *International Journal of Cancer* 1994. 58: 809-813.

<sup>2</sup> Walter SD, Marrett LD, From L, Hertzman C, et al 'The association of Cutaneous malignant melanoma with the use of sunbeds and sunlamps' *American Journal of Epidemiology* 1990.131 (2): 232-43.

<sup>3</sup> Westerdahl J, Olsson H, Masback A, Ingvar C, et al 'Use of sunbeds or sunlamps and malignant melanoma in southern Sweden' *American Journal of Epidemiology* 1994. 140 (8).

<sup>4</sup> Lavker RM, Veres DA, Irwin CJ, Kaidbey KJ. 'Cumulative effects from repeated exposures to suberythermal doses of UVB and UVA in human skin; *Journal of the American Academy of Dermatology* 1995. 32: 53.

<sup>5</sup> Rhiands M, DeGuire L, Claveau J. 'A population based survey on the use of artificial tanning devices in the province of Quebec, Canada; *Journal of the American Academy of Dermatology* 1990: 572-6.

Recently the solarium tanning industry introduced new “fast tanning” or “10 minute” machines. These are even more dangerous because they emit UV in higher doses.

### **Solariums pose health hazards**

- If the eyes are exposed to UVA, the cornea and the conjunctiva may be briefly inflamed and sight can sometimes be permanently damaged.
- Up to half the people who use solariums develop minor skin irritations such as redness, itchiness and dryness. Solariums can also aggravate some existing rashes. If you use a solarium excessively, in the short term your skin may burn and blister and in the long term prematurely age or develop skin cancer.
- Some prescription drugs, including some antibiotics and diuretics, and some cosmetics, can increase sensitivity to UVA. Using a sunlamp or solarium in these circumstances may result in severe sunburn; it can cause an itchy or painful rash that may be followed by darker blotches of pigmentation on the skin; and it may also damage the eyes.
- The UV from sun beds can cause changes in the body’s immune system, although we do not yet know the importance of these changes.

### **Important facts**

- A solarium tan is produced by ultraviolet light.
- All forms of ultraviolet light contribute to skin cancer.
- All forms of ultraviolet light cause premature ageing of the skin. This may be evident as wrinkling, loss of elasticity, sagging, yellowish discolouration and brown patches.
- No solarium can give a safe tan.
- Artificial ultraviolet light exposure is unnecessary for optimal vitamin D production in Australia.
- There is no scientific evidence in humans to indicate that solarium usage lowers the chance of developing cancers such as breast or bowel cancer.

**The Australasian College of Dermatologists, The Cancer Council Australia and The Cancer Society of New Zealand do not support cosmetic tanning in solariums under any circumstances.**

Australia has no regulated training for people operating tanning clinics nor is there any requirement for their equipment to be checked or serviced.

Under the Australian Standard AS2635-1983, solarium operators should provide you with a consent form to read and sign on your first visit, but the Australian Standard is voluntary. If you decide to use a solarium insist the operator gives you a consent form.

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#### **CANCER SUPPORT CENTRES**

180-4 Collins Street	HOBART
5/ 216 Charles Street	LAUNCESTON
103 Oldaker Street	DEVONPORT
54 Cattley Street	BURNIE

CANCER COUNCIL HELPLINE **13 11 20** or email [helpline@cancertas.org.au](mailto:helpline@cancertas.org.au)  
[www.cancertas.org.au](http://www.cancertas.org.au)