

Have Fun in the Sun without Getting Burned

Did you know that every Canadian has a 1 in 7 chance of developing skin cancer in their lifetime and that 90 percent of all skin cancers can be prevented? Skin cancer results from exposure to UV rays whether they're from the sun or a tanning bed.

UV Radiation 101

Ultraviolet light is high energy, invisible light. There are three types of UV sun rays: UVA, UVB, and UVC. UVA rays penetrate deep into the skin and cause both wrinkles and skin cancer. (Tanning beds emit up to five times more UVA rays than natural sunlight.) UVB rays cause sunburns and skin cancer. An easy way to remember is A is for *Aging* and B is for *Burns*. UVC rays are filtered by the ozone and rarely reach the earth.

UV rays penetrate windows and clouds. So even on a cloudy day, when you don't feel the heat or see the sun, your skin is still exposed to damaging UV rays. Moreover, both water and snow reflect and magnify the sun's rays, so you should be extra careful when you're in the water or spending the day skiing.

Skin Cancer

There are three types of skin cancer: melanoma, basal skin cell cancer and squamous cell cancer. Of these, only melanoma is deadly; luckily, it is the least common form of skin cancer.

Melanoma starts as a flat brown spot with an irregular border. It doesn't resemble other freckles as it is often asymmetrical and may be made of colors other than brown such as red, grey or black. Melanomas can also be raised and itchy.

If caught early, it is almost always curable. Unfortunately, the most common spots are on men's upper backs and ladies calves, two places people fail to look. At the Nasser Medical Centre, I routinely do a thorough mole check on all my fair-skinned patients in April and if there are any concerning lesions, we either remove them immediately or have a repeat check at the end of the summer to look for changes.

Basal cell carcinoma is the most common type of skin cancer. It is found on sun-exposed areas and classically appears as a blister-like bump that is pink or flesh-coloured. It usually grows until it becomes crusted over. It will destroy all the underlying tissue if left alone. I've seen patients who've lost their entire nose to basal cell skin cancer.

Squamous cell carcinomas can be brown or pink and are also found on sun exposed areas. They usually occur in people with a history of one or more severe sunburns. Like basal cell skin cancer, squamous cell cancer is not deadly but it needs to be removed early as it can eat away at all your normal skin.

Sunscreen Tips

Choose a sunscreen with both UVA and UVB protection. Previously, sunscreens only denoted SPF (Sun Protection Factor) which is a measure of protection against UVB rays. All new sunscreens must now denote their degree of protection against UVA rays as well. When choosing a sunscreen, make sure to pick one with at least **SPF 30** and with **broad spectrum UVA coverage** and wear it daily. There are two types of sunscreen ingredients: chemical and barrier. Chemical sunscreens should be applied at least 15 minutes before going outdoors and are not safe in children under two. Barrier sunscreens are safe for all ages and can be applied immediately before going outside.

If the label states “**water-resistant**,” then there will be 40 minutes of protection during water exposure whereas “**water-proof**” sunscreen lasts 80 minutes in the water. The most common reason people burn even when wearing sunscreen is that they have not applied a sufficient amount. Adults require a minimum of 2 tablespoons of sunscreen for full-body coverage and this should be reapplied every two hours.

My personal favourite sunscreens are “Neutrogena Sensitive Skin Sunblock” and “Vivier’s SPF 30 Triple Block Protection” as they are both non-comedogenic barrier sunscreens, safe for all ages. Enjoy the sun and remember, wear sunscreen!