

CDA POSITION STATEMENT

Sun Protection and Sunscreen Use

A comprehensive sun protection strategy includes limiting time spent outdoors between 10 a.m. and 3 p.m. during the summer (when ultraviolet radiation is highest), seeking shade, sunglasses, sun-protective clothing, and the use of sunscreen. In addition, it is important to avoid tanning beds since they give off ultraviolet radiation. The World Health Organization's International Agency of Research on Cancer has determined that UV radiation from the sun and artificial sources such as tanning beds, is a carcinogen, a substance that causes cancer. Since up to 80% of UV rays can penetrate clouds, sun protection is still required on cloudy days. Since water, snow and sand reflect the damaging sun rays, extra care must be taken when you are near them.

Sun protection minimizes short- and long-term damage to the skin from the sun's harmful radiation, including DNA damage, sunburn, hyperpigmentation (dark spots), skin cancer, and photoaging, including wrinkles and age spots. Seeking shade, sun-protective clothing, wide-brimmed hats, sunscreen and sunglasses can protect you from UV exposure. Sun-protective clothing has tighter weave design and should cover as much of the trunk and extremities as possible for optimal sun protection. A wide-brimmed hat that covers the ears and neck helps reduce excessive ultraviolet radiation exposure on the face, ears and neck. Sunglasses labeled with UV 400 block nearly 100% of harmful ultraviolet rays.

Dermatologists continue to recommend generously applying a water resistant, broad-spectrum sunscreen – one that protects against ultraviolet A and B (UVA and UVB) – with a sun protection factor (SPF) of 30 or higher before sun exposure to all skin that clothing and hats don't cover. Don't forget to apply sunscreen to your lips, ears, neck, top of your head, and tops of your feet if they are exposed.

Sunscreen products contain one or more active ingredients — compounds that absorb, scatter or reflect ultraviolet radiation — and are regulated as over-the-counter drugs by Health Canada. Organic sunscreen filters absorb the sun's rays while mineral sunscreens, such as titanium dioxide and zinc oxide, absorb and reflect the sun's rays. Health Canada regulates the manufacturing, marketing, and safety monitoring of all sunscreen products. There are a wide range of sunscreen products on the market today. For a list of those that have been found to be sun-stable and reliably protect against both UVA and UVB, see the Canadian Dermatology Association's list of recognized sunscreen products, then choose the form (i.e. cream, lotion, spray, or balm) that you would prefer to use. Use of sunscreen sticks around the eyes may limit sunscreen running into your eyes. When using a spray sunscreen, do not inhale it or apply near heat, or by an open flame. Never spray a sunscreen on your face; instead, spray it on your hands, then use your hands to put it on your face. Spray sunscreens should be rubbed in after application to make sure that areas are not missed. The average adult requires approximately two tablespoons of sunscreen to cover the whole body, and a teaspoon to cover the face and neck. Sunscreen should be reapplied after swimming, strenuous exercise, sweating, or towelling off.

Visible light generates reactive oxygen and nitrogen species which can damage the skin and cause skin darkening, especially in individuals with darker skin tones. If you have dark spots, you should choose a tinted sunscreen which contains pigmentary titanium dioxide and iron oxide. Tinted sunscreen blends into your skin tone, preventing the white cast from sunscreen. Antioxidants such as vitamin C have been added to some sunscreens in order to lessen oxidative stress on the skin, however not all formulations containing antioxidants are beneficial. In order to be beneficial, they must be stable in the sunscreen, and absorbed in sufficiently high concentrations into the epidermis and dermis.

Sunscreen should be kept at room temperature < 30°C. Sunscreen should be disposed of after the expiry date written on the sunscreen container or sooner if it has been exposed to extremes of temperature, which may occur in automobiles, golf carts and strollers, as such storage conditions may affect their stability and lower the ability of sunscreen to protect the skin.

Tinted sunscreens that contain iron oxide help filter out visible light apart from UVA and UVB, and may have the added benefit of minimizing pigmentary change and help camouflage uneven skin tone. This is particularly important in individuals with skin of color and the Indigenous population in Canada where sunscreen use is at the lowest level. Although people with dark or brown skin are approximately 8x less sensitive than people with white skin in terms of sunburn, the importance of sunscreen use in this population cannot be overemphasized. Visible light from sunlight is known to increase pigmentary changes in skin of colour.

Anyone with questions about sun protection and sunscreens should speak to a Royal College of Physicians and Surgeons of Canada (FRCPC) Certified Dermatologist, who can use their expertise to help you develop an effective sun protection plan.

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Established in 1925, the Canadian Dermatology Association (CDA) is a member organization that advocates for dermatologists across Canada, underscoring their essential role in the healthcare system. As a community of Certified Dermatologists, we are dedicated to advancing the science of dermatology encompassing over 3000 skin, hair and nail conditions. Our commitment extends beyond professional support; we also protect and educate the public through comprehensive educational initiatives and our product recognition program.

