

# **SUNSCREENS**

#### The Issue

More Canadians are using sunscreens to protect themselves from the sun's harmful ultraviolet (UV) rays.

## **Background**

Exposure to UV radiation, primarily UVB, can cause sunburns and may eventually result in skin cancer. It is important to note that while sunscreens can help reduce sunburn, they are not as effective against the other harmful effects of UV rays, such as premature aging and depression of the immune system.

All sunscreens have a sun protection factor (SPF) on their labels. The SPF represents the length of time that sunscreen-protected skin can be exposed to UV rays before a minimal redness (erythema) appears, compared to the length of time it takes on unprotected skin. In other words, it indicates how much longer you can be exposed to the sun before getting a sunburn. For example, without a sunscreen, you might get a sunburn after 20 minutes or less in the sun. If you apply a sunscreen of SPF 15, you could spend up to 300 minutes under the sun before sunburning that is 15 times longer than if you were not protected. However, this does not mean that damage to your skin, other than sunburning, has not already started.

The SPF varies depending on the nature of the sunblocking ingredients in the product. For sunscreen to be most effective, always apply the recommended amount and respect the waiting period between application and exposure.

### **How Sunscreens Protect Your Health**

There are many different brands of sunscreen available. They are classified according to their active ingredients as some products contain chemical filters, some contain physical filters and some contain both. In addition, some sunscreens contain antioxidants that halt damaging byproducts, called free radicals, that your skin produces during UV exposure.

- Chemical filters absorb, scatter, or reflect some of the UV radiation. There are more chemical filters that absorb UVB rays than absorb UVA rays, broad spectrum sunscreens contain both UVA and UVB filters
- Physical filters contain microscopic particles of mineral oxides, which absorb, scatter and reflect both UVB and UVA radiation, broad spectrum sunscreens with physical filters are common



While it can be difficult to choose between products, a broad spectrum sunscreen with an SPF of 15 or higher should provide adequate protection. Be sure to follow the instructions on the label.

### **Minimizing Your Risk**

For best results, use the amount of sunscreen recommended on the product label and apply it at least 20 minutes before going out in the sun. Reapply it 20 minutes after you go out, so that the product stabilizes on your skin and gives you maximum protection. If you are sweating heavily or swimming, reapply sunscreen frequently to get the best protection.

Here are other steps that Health Canada recommends you take to protect against UV exposure:

- If possible, avoid being in the sun between 11 a.m. and 4 p.m.
- Look for shade, stay under a tree, or use an umbrella
- During outdoor activities, wear sunglasses, adequate clothing and a large-brimmed hat
- Don't forget to apply sunscreen to all exposed areas of your skin

#### **Need More Info?**

If you would like to learn more, visit Health Canada's Sun Safety Web site:

(http://www.hc-sc.gc.ca/ehp/dhm/catalogue/brp\_pubs/99dhm2 33.htm)

Or look at some of It's Your Health related articles at:

Sunglasses

(http://www.hc-sc.gc.ca/english/iyh/products/sunglasses.html)

**UV** Radiation

(http://www.hc-sc.gc.ca/english/iyh/environment/ultraviolet.html)

Skin Cancer

(http://www.hc-sc.gc.ca/english/iyh/diseases/cancer.html)

Canada Safety Council Sun Safety Alert http://www.safetycouncil.org/info/sport/alert.html