



This article was produced in collaboration with the Public Health Agency of Canada.

PREVENTING SKIN CANCER

The Issue

Most cases of skin cancer are preventable. You can reduce your risk of getting skin cancer by taking some simple but important steps.

Background

Skin plays a vital role in keeping you healthy. It is the largest organ in your body, and it protects you from potential problems caused by such factors as dehydration, the sun, bacterial infections, and pollution. However, there are limits to the skin's ability to provide protection. Various factors can cause damage that cannot be repaired. This is how skin cancer may develop.

Types of Skin Cancer

There are three main types of skin cancer: basal cell carcinoma, squamous cell carcinoma and malignant melanoma.

Most cases of skin cancer in Canada are either basal or squamous cell carcinomas. These skin cancers tend to develop later in life on areas of skin that have been exposed repeatedly to the sun, such as the face, neck, or hands. Basal and squamous cell carcinomas progress slowly and rarely cause death because they usually do not spread to other parts of the body. These cancers are easily removed by surgery.

Malignant melanomas are different. They account for about 5% of all skin cancers, and are the type most likely to be fatal. Unlike other skin cancers, they occur earlier in life and progress rapidly. They may develop on almost any part of the body.

The occurrence of skin cancer has been increasing in Canada at a fairly constant rate over the past 30 years. In 2005, there were

roughly 78,000 new cases of basal and squamous cell carcinomas reported in Canada, and about 4,400 new cases of malignant melanomas.

Causes of Skin Cancer

One of the main causes of skin cancer is exposure to ultraviolet radiation, or UV rays. UV rays are invisible, and are produced by the sun and tanning lamps. Most often, skin cancer is the result of overexposure to the sun.

UV rays cause skin cancer by creating changes in the cells of the skin. In some cases, the UV rays cause direct damage to the cells. Tans and sunburns, for example, are both signs that UV rays have damaged the skin. In other cases, UV rays cause skin cancer indirectly, by weakening the immune mechanisms in skin and the rest of the body.

Many studies of skin cancer show links between malignant melanomas and an individual's intolerance to sun exposure. The studies indicate that people who have suffered severe and frequent sunburns during childhood are at greater risk of developing skin cancer. The features most closely associated with intolerance to sun exposure include fair or freckled skin, blue eyes, and light-coloured or reddish hair.

Minimizing Your Risk

Most people can prevent skin cancer by avoiding overexposure to the sun and other sources of ultraviolet light, such as tanning lamps. To avoid the harmful effects of UV rays, you should:

- Select shaded areas for outdoor activities.



- Wear a broad-brimmed hat and clothing with a tight weave, including a long-sleeved shirt, long pants and gloves, if you have to spend long periods in the sun.
- If you cannot cover up, use a sunscreen lotion with a Sun Protection Factor (SPF) of at least 15. Make sure it has both UVA and UVB protection. Apply liberally to exposed skin 15 to 30 minutes before going out in the sun, and re-apply 15 to 30 minutes after sun exposure begins. You should also re-apply sunscreen after vigorous activity that could remove the product, such as swimming, toweling or excessive sweating and rubbing.
- Avoid overexposing yourself to the sun without protection, especially between 11:00 a.m. and 4:00 p.m. during the summer months.
- Avoid the use of tanning lamps.
- Be aware that certain medications can make your skin more sensitive to UV rays. Consult your doctor if you have questions about your medication.

The precautions listed above are especially important for babies and children, who are at greater risk than adults because of their more sensitive skin. In addition:

- Never let infants or young children play or sleep in the sun in a playpen, stroller, or carriage.
- Never let young children stay in the sun for long periods, even when wearing sunscreen.
- Get your children used to wearing sunscreen lotion. Pay particular attention to the areas that are most exposed, such as the face, lips, ears, neck, shoulders, back, knees, and the tops of their feet.

- Provide teenagers with sunscreen lotion if they are going to be outdoors for extended periods during the summer. Make sure they understand the importance of using it.
- Advise teenagers to avoid using tanning lamps.

The best way to detect skin cancer in its early stages is to examine your skin often. See your doctor right away if you notice any of the following:

- abnormally dark or discoloured patches or spots
- bleeding, crusting or change in the colour, size, or shape of a mole.

The Government's Role

Health Canada and the Public Health Agency of Canada work in partnership to monitor cancer in Canada. This involves identifying trends and risk factors for cancer, developing programs to reduce cancer risks, and doing research to evaluate risks from the environment and human behaviours. As part of this work, Health Canada also promotes public awareness about sun safety and the harmful effects of UV radiation.

Need More Info?

Contact:
Consumer and Clinical Radiation Protection Bureau
Health Canada
775 Brookfield Road
Ottawa, ON K1A 1C1
Telephone: 613-954-6699
E-mail: ccrpb-pcrpcc@hc-sc.gc.ca

Or, visit the following Web sites:

Health Canada's Web site on Ultraviolet Radiation at:
http://www.hc-sc.gc.ca/ewh-semt/radiation/ultraviolet/index_e.html.
This Web page has links to many useful resources, including A Parent's Guide to Sun Protection and Babies, Children and Sun Safety.

The Public Health Agency of Canada's Web site on Cancer at:
http://www.phac-aspc.gc.ca/ccdpc-cpcmc/cancer/index_e.html

Health Canada's Sun Awareness Program site:
http://www.hc-sc.gc.ca/hl-vs/secureit/sports/sun-sol/uv-prog/index_e.html

The Canadian Cancer Society's national Web site at:
http://www.cancer.ca/ccs/internet/niv_splash/0%2C%2C3172%2C00.html

Also, see the following It's Your Health articles:

Sunscreens at:
http://www.hc-sc.gc.ca/iyh-vsv/life-vie/sun_soleil_e.html

Tanning Lamps at:
http://www.hc-sc.gc.ca/iyh-vsv/life-vie/lamp_e.html

UV Radiation from the Sun at:
http://www.hc-sc.gc.ca/iyh-vsv/environ/ultraviolet_e.html

For additional articles on health and safety issues go to the It's Your Health Web site at:
www.healthcanada.gc.ca/iyh

You can also call toll free at 1-866-225-0709 or TTY at 1-800-276-1245*.