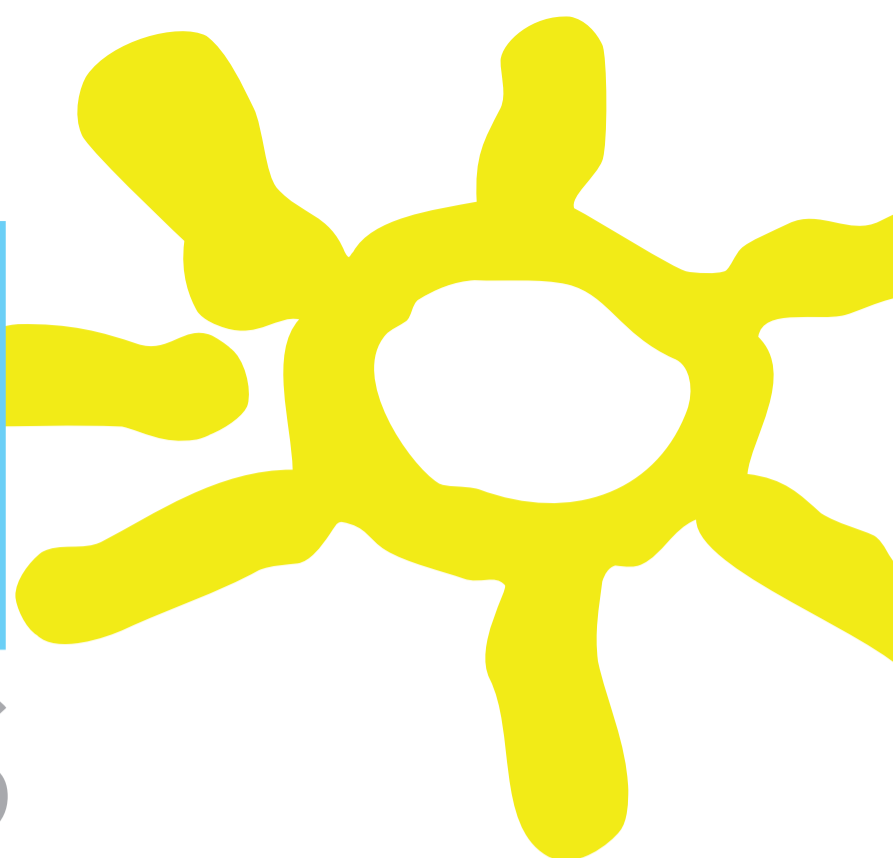


# SUN AWARENESS



There's no question, the sun's warmth feels pleasing. But deep down, the harmful effects of solar radiation on our skin range from premature aging to potentially lethal cancer. Instead of living in the dark, avoiding the serious risks associated with sun exposure begins with knowledge.

If the way you look matters to you, says Joel DeKoven, a dermatologist at Sunnybrook Health Science Centre in Toronto, you should know that up to 90 per cent of the skin damage we attribute to aging is entirely preventable.

In fact, it is not aging at all, but photoaging – preventable damage caused by ultraviolet rays from the sun and artificial tanning sources.

Prevention begins with awareness. "People often believe that sun damage occurs only when they go on vacation," says Dr. Vince Bertucci, a dermatologist in Woodbridge, Ontario. "The reality is that it also occurs when you're out in your backyard or just driving your car."

You don't need to be lying on the beach."

To see the results of photoaging, advises Dr. Bertucci, compare the quality of the skin in the central upper chest area, which is almost constantly exposed except in the winter months, to skin in an area that is normally covered, such as on the upper, inner arm. "You can see how much sun damage has accumulated on a day-to-day basis over the years – perhaps without even trying to get a tan."

Photoaging is measurable in people in their teens, and begins to manifest as wrinkles and discoloration as early as the twenties. But looking up to 90 per cent younger is easy: "Whether you're walking the

dog or just going out to do your grocery shopping, wearing protective clothing and a sunscreen with a broad-spectrum SPF makes a world of difference," says Dr. Bertucci.

"Sun-kissed' is good if you're an orange, but people pay a very high price for that look," says Dr. DeKoven. "It's healthy to be involved in outdoor activities, but if you want to look your age or younger – to avoid looking 50 when you're 40 – protect your skin. When you can, avoid the sun in peak hours, between 11 a.m. and 4 p.m.; wear a hat and use a sunscreen that has good protection against both UVA and UVB."

For Canadians, the majority of photoaging damage occurs

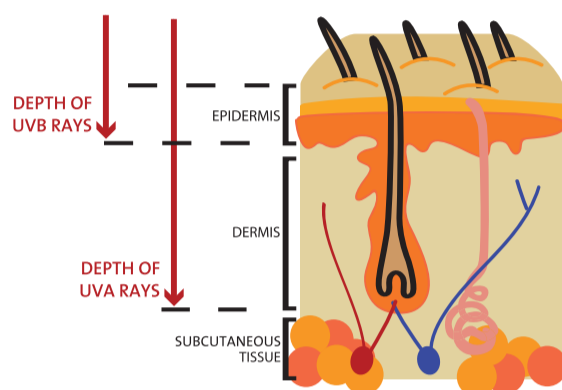


ILLUSTRATION: THE CANADIAN DERMATOLOGY ASSOCIATION

The skin can repair many of the mutations caused by UV rays, but if the damage is too great, the affected cells may die or mutations may occur. This results in premature aging, the formation of actinic keratoses (pre-cancers) and skin cancer.

on the face, neck, hands and forearms. "You'll see many people with significant purple blotches on their forearms,"

says Dr. DeKoven. "It looks as if they're bleeding under their skin and in fact they are, from ultraviolet damage to the skin's underlying support structure. On the face, people get brown spots, fine and deep lines and yellowish discoloration."

Indoor tanning is a growing cause of photoaging, says Dr. DeKoven, noting that the World Health Organization has now identified indoor tanning as a carcinogen. "We're seeing younger and younger people tanning indoors, and ultraviolet A, which penetrates most

deeply into the skin, contributes significantly to photoaging over time."

A tan is evidence that the skin has sustained an injury. "In our society, it is looked upon by some people as looking healthy, but if you look at unretouched photos of [someone who has done a lot of tanning] the damage is striking," he says. "Your skin has a memory, and down the road the damage is going to show up."

News that many Canadians may be vitamin D deficient has tempted some people to forego their sunscreen, but there really is no need to damage the skin, says Dr. Bertucci. "There are many safe ways of meeting vitamin D requirements that don't increase your risk of skin cancer and photoaging, including taking a daily supplement."

Genetics do play a role in determining how photoaging manifests in later life, says Dr. DeKoven, as do other health behaviours. "Dermatologists can identify people who smoke just by looking at their skin. If you tan and smoke, you are really compounding the effects of photoaging." ■

## About The Canadian Dermatology Association



The Canadian Dermatology Association, founded in 1925, represents Canadian dermatologists, the physicians who specialize in the care and treatment of the skin, hair and nails. The association exists to advance the science and art of medicine and surgery related to the health of the skin; provide continuing medical education for its members; support and advance patient care; offer public education on sun protection and other aspects of skin health; and promote a lifetime of healthy skin, hair and nails.



## Screening your sunscreen

The right sunscreen can help prevent skin cancer and protect you from photoaging (sun damage that manifests as skin damage often attributed to aging). But how do you know if the product you're choosing has the ingredients necessary?

The Canadian Dermatology Association (CDA) makes it easy – look for its logo, and you know you're protected.

The association asks that sunscreen manufacturers interested in displaying the CDA logo and recognition statement complete an application form for each of their products, and submit it along with independent laboratory test results substantiating that the product has met the approval criteria:

- the product has a UVB sun protection factor (SPF) of at least 30,
- the product contains a broad-spectrum UVA block,
- the product is non-comedogenic, non-irritating and hypo-allergenic, and
- the product is minimally or non-perfumed.

The CDA reviews all packaging and advertising for each sunscreen, and will not consider any product that is market-

ed for tanning. Manufacturers displaying the CDA logo also agree to take a proactive stance regarding protection against sun damage to the skin.

If sunscreens meet the criteria listed above, the manufacturer can display the Canadian Dermatology Association's logo and the following statement on that specific product, usually on the packaging.

"The sun may cause sunburn, premature aging of the skin and skin cancer. Avoiding the sun, wearing protective clothing and regular use of sunscreens over the years may reduce the chance of these harmful effects. The sunscreens in this product meet the criteria established by the Canadian Dermatology Association."

Funds generated by the program sponsor the Canadian Dermatology Association's Sun Awareness Program and its Skin Cancer Screening Program. ■

For a list of all approved sunscreens in Canada, visit [www.dermatology.ca/sunscreens](http://www.dermatology.ca/sunscreens). Adapted with permission from the Canadian Dermatology Association.

## EDUCATION

### Program sheds light on living well under the sun

The body's largest organ – the skin – pays a price for protecting us against the outside world: it's vulnerable to damage from the sun's ultraviolet (UV) rays, including sunburn, premature aging, pre-cancerous change and various skin cancers, including melanoma.

However, eight out of 10 Canadians are unaware that the sun causes as much as 90 percent of skin aging on exposed areas, which is why this process, called photoaging, is the subject of the Canadian Dermatology Association's Sun Awareness campaign this year.

Too much UV actually suppresses the skin's immune system, which is responsible for destroying abnormal cells before they have a chance to multiply and morph into cancer. It's this one-two blow that's behind the 80,800 new cases of skin cancer that will be diagnosed this year, including 5,300 of the deadliest type, melanoma.

"Almost three people die of skin cancer in Canada each day," says Dr. Jason Rivers, a clinical professor of dermatology at the University of British Columbia in Vancouver.

"While the majority of skin cancers aren't life-threatening, they can be quite disfiguring." (Skin cancers commonly occur on the face, and surgical removal typically leaves a scar, explains Dr. Cheryl Rosen, national director of the Sun Awareness Program.)

But that doesn't mean that Dr. Rivers, who previously served as head of the Canadian Dermatology Association's National Sun Awareness and

Skin Cancer Prevention Program for seven years, recommends hiding in the house all summer. "It's important to get outside and participate, because there are data suggesting that exercise can reduce the risk of skin cancers," he notes. "I wholeheartedly endorse people being outdoors and being active."

Rather than shunning the sun, experts advocate taking measures to protect your skin, including trying to schedule outdoor activities before 11 a.m. and after 4 p.m.; wearing protective clothing like wide-brimmed hats, sunglasses and long-sleeved, tightly-woven shirts when feasible; and using a broad-spectrum (covering

both UVA and UVB) sunscreen with an SPF of at least 30 on exposed areas. (Apply roughly 30 minutes before heading outdoors, and reapply after sweating and/or swimming.)

Or, as Dr. Rosen sums it up: "Have a great time, and protect yourself as best you can." ■

**"It's important to get outside and participate, because there are data suggesting that exercise can reduce the risk of skin cancers. I wholeheartedly endorse people being outdoors and being active."** Dr. Jason Rivers



When enjoying outdoor activities, protect your skin – and that of those you love – by scheduling outdoor activities before or after peak sun hours, wearing protective clothing and using a broad-spectrum sunscreen. PHOTO: ISTOCKPHOTO.COM



Canadian Dermatology Association  
Association canadienne de dermatologie

HEALTH AND WELLNESS

## Cancer's most common form also among the most preventable

Far and away the most common form of cancer, with 80,800 new cases expected in Canada this year, skin cancer is also one of the most preventable and treatable.

The fact the skin is readily visible also makes skin cancer the easiest to detect. "Most skin cancers are not found by physicians, but by patients themselves," said Dr. Mariusz Sapijaszko, a clinical professor of dermatology at the University of Alberta in Edmonton.

Of course, to find a skin cancer, you have to know what you're looking for. The two most common types of non-melanoma skin cancer, basal cell carcinoma and squamous cell carcinoma, can appear as wart-like growths or patches of rough, scaly skin; both may bleed easily when brushed, towelled or otherwise touched. Melanomas tend to show up as either new moles or changes in the colour, shape or size of existing moles.

Experts recommend a self-examination of your skin (use a hand mirror for hard-to-search areas) once a month, and examination by your family doctor or dermatologist once a year. "Any spot that's changing, bleeding or scabbing, or a spot that just won't heal within a month, should be checked by your physician," advises Dr. Vince Bertucci, a consultant dermatologist at Women's College Hospital in Toronto.

While these rules apply to everyone, you'll want to be extra vigilant if you have one or more risk factors for skin

cancer, which include a history of blistering sunburns (particularly as a child or teen); a close relative with melanoma; a personal history of skin cancer or pre-cancerous growths called actinic keratoses; light-coloured skin, eyes and/or hair; and multiple moles.

You should also do what you can to reduce your risk, by protecting yourself from the sun with protective clothing and sunscreen.

There's evidence that public education efforts like the Canadian Dermatology Association's Sun Awareness Program are not only saving lives through early detection, but

also preventing skin cancers from occurring in the first place. A recent University of Alberta study found that cases

of non-melanoma skin cancers in that province are declining, which researchers believe may be due to increased awareness

of the importance of sun-protective measures.

"Excessive sun exposure is probably one of the biggest

risk factors," stressed Dr. Bertucci, and happily, it's one that you have the power to change. ■

### Recognize the ABCDEs of melanoma

Melanoma commonly appears on the back and legs in lighter-skinned people and on the hands, feet and nails in darker-skinned people. If you are concerned about changes in a specific mole, see your dermatologist. In the meantime, watch for these signs:

#### ASYMMETRY

The shape on one side is different than the other side.

#### BORDER

The border or visible edge is irregular, ragged and imprecise.

#### COLOUR

There is a colour variation with brown, black, red, grey or white areas within the lesion.

#### DIAMETER

Diameter growth is typical of

melanoma. It is usually more than 6 mm, although it can be less.

#### EVOLUTION

Look for change in colour, size, shape or symptom (i.e. itching, tenderness or bleeding).

For additional information, please consult [www.dermatology.ca](http://www.dermatology.ca).

### PERSONAL INSIGHT

## Harmed by tanning bed use, nurse warns against risks

Jackie Connors, a 36-year-old nurse in St. John's, Newfoundland, knows all the important statistics about skin cancer.

She can tell you, for example, that about every seven hours, one Canadian dies of skin cancer. She can also tell you that indoor tanning before the age of 30 has been associated with a significant increase in the risk of melanoma, the deadliest of skin cancers.

You might guess that's because she is a nurse in a dermatology clinic, but you'd be wrong. Ms. Connors' passion for skin cancer prevention stems from the most personal experience of all.

Reminiscing about her teens, she says, "I don't recall anyone at our graduation who

wasn't tanned. Everybody did it. I used tanning beds every other day for about four years – it was definitely addictive."

When she was at nursing school, she learned about the signs of skin cancer, and realized that a very dark, irregular, raised spot on her leg that bled after shaving should be examined by a dermatologist.

The spot was removed, and she was devastated to learn of the diagnosis: melanoma. Further surgery was necessary to remove a wide margin of skin around the cancerous lesion, and Ms. Connors has since undergone two further treatments for melanomas on her back and neck.

The fear and grief she has experienced inspires her to share her story whenever she

can in the hope of convincing teens and their parents to avoid over exposure to dangerous UV rays, especially indoor tan-

ning beds. "They can't believe what I've been through, but I show them the scars," she says.

In her teens, the dangers of

tanning beds were unknown, she says. Today, the body of evidence revealing their link to skin cancer is so strong that the World Health Organization has recently identified them as a known carcinogen.

Noting that her parents deeply regret allowing her to use tanning beds, Ms. Connors says, "Over the past five or 10 years, knowledge about the dangers of using tanning beds has really grown. It's important that people find out the facts about indoor tanning."

While that golden glow can look attractive and even healthy today, she wants young people to know that it simply isn't worth risking your life for. As someone who has survived melanoma, she says, "Don't learn the hard way." ■



Jackie Connors has undergone three surgeries to remove melanomas from her leg, back and neck. Today, she shares her story in the hope of inspiring young people to protect themselves and avoid tanning beds. PHOTO: BRAD BRAZILL



Canadian Dermatology Association  
Association canadienne de dermatologie



ADVOCACY

## More dermatologists needed to meet growing needs in Canada

**R**ising skin cancer rates, along with a growing and aging population, mean that more Canadians need access to treatment and care from dermatologists.

Meeting those needs, however, is a growing challenge. With a population of over 30 million, Canada has just 600 to 700 practising dermatologists. Longer patient wait times are already the norm, particularly in smaller communities, and the situation threatens to worsen without corrective action. According to a workforce survey published in the fall of 2009, 45 per cent of dermatologists plan to retire within the next decade.

“In my practice, a new patient who’s not in need of urgent care will likely wait six months for an appointment,” says Dr. Denise Wexler, vice

president of the Canadian Dermatology Association (CDA). Dr. Wexler has a large general dermatology practice in London, Ontario. “It’s frustrating for both the patients and the physicians. Dermatologists want to be able to spend more time with our patients and to see them sooner, but as the demands grow, that’s getting more difficult.”

In the 1990s, Canadian policy-makers cut medical student and residency training positions to deal with what was seen as a surplus of physicians. Today, the country faces shortages in many medical disciplines, including dermatology. Meanwhile, the older population has more dermatologic needs, and rates for the most serious form of skin cancer, melanoma, are increasing.

“Longer wait times are a major concern,” says Dr.

Wexler. “If you have a skin cancer, especially a melanoma, a delay in diagnosis and treatment could be very serious. People with serious acne, eczema or hand dermatitis who can’t get timely treatment face diminished daily functioning and quality of life.”

Dermatologists are also concerned about patients taking over-the-counter products when they can’t access medical care for a skin problem. “Patients may self-diagnose and seek out the wrong remedy,” says Dr. Ian Landells, a dermatologist in St. John’s, Newfoundland, and CDA president-elect. “For example, there are OTC topical steroids that can be potentially harmful to the skin if not used appropriately.”

Without more dermatologists, Canadians are going to



Increasing the number of positions for dermatology residents in Canada will help address a growing shortfall of dermatologists that will otherwise result in increasing delays in diagnosis and treatment of very serious diseases. PHOTO: ISTOCKPHOTO.COM

face even more difficulties in accessing appropriate care in the coming years. “More baby boomers will be hitting the age where they will develop more skin cancers, as our numbers diminish from retirements,” says Dr. Landells.

A solution that will pay off relatively quickly, says Dr. Landells, is to increase the number of dermatology residencies. “I am approached every year by medical students in St. John’s who want to get into dermatology, but it’s difficult to get in across the country, with fierce competition for a relatively small number of positions. The people who want to become dermatology residents are there, so if we could increase the positions, within five years, we would start to generate new dermatologists.” ■

“I am approached every year by medical students in St. John’s who want to get into dermatology, but it’s difficult to get in across the country, with fierce competition for a relatively small number of positions.” Dr. Ian Landells

## Health groups urge prohibition of artificial tanning by youths

**T**he potent ultraviolet (UV) radiation emitted by tanning beds poses a serious skin cancer risk to users, particularly to young people. With the ongoing popularity of artificial tanning, dermatologists continue to warn about the dangers of tanning devices and to call for regulations to better protect Canadians, especially those under 18. And more political decision-makers are responding to the call.

In 2009, the World Health Organization’s International Agency for Research on Cancer (WHO-IARC) moved UV

tanning beds to its highest cancer risk category – “carcinogenic in humans.” The agency also stressed the scientific evidence showing that the risk of skin cancer increases by 75 per cent for those who use tanning beds before the age of 30.

In 2010, an estimated 75,500 Canadians will be diagnosed with non-melanoma skin cancer, resulting in 280 deaths. Melanoma cases are estimated at 5,300, with 920 deaths.

“Exposure to harmful UV rays in childhood is the greatest predictor of melanoma and basal cell carcinoma in adult-

hood,” says dermatologist Dr. David McLean, who is the head of cancer prevention at the BC Cancer Agency. “All tanning is a result of damage to the skin’s DNA, and it’s cumulative – each exposure adds more to the pre-existing damage, causing eventual wrinkling and higher skin cancer risk.”

Dr. McLean says it’s a matter of great concern that so many teenage girls are flocking to tanning salons. Another worrisome trend, he says, is the marketing of indoor tanning as a source of Vitamin D. “To imply there is a health benefit

from damaging your skin, when one in seven Canadians is getting skin cancer, is very disturbing.”

The Canadian Dermatology Association has been calling for a ban and supports provincial prohibitions on use of tanning devices by people under 18. “A number of countries in Europe have taken this step, and the New Brunswick government has enacted legislation to ban use under age 18. I believe every province should do the same,” Dr. McLean says.

Action is also being pro-

posed on the federal front. Conservative Member of Parliament for Selkirk-Interlake, Manitoba, James Bezan has sponsored a private member’s bill on warning labels for tanning devices. Mr. Bezan’s wife has been diagnosed with two separate melanomas.

“As someone who has been personally affected by melanoma skin cancer, with my wife’s battle, I feel it’s necessary to do a better job on education and consumer awareness about the dangers of indoor tanning,” says the MP. “The best way to do that is

through strong, visible warning labels on the equipment.”

Under the proposed regulations, radiation warning labels would be larger and visible to users, draw a clear link between skin cancer and UV rays, and recommend that youth under 18 not use tanning beds. “With the risks so high for young people, we have to take action as policy-makers,” says Mr. Bezan. “At the federal level, all we can do is regulate the labelling side, but I am reassured to see more provinces are considering banning use by minors.” ■