

## Update: Lung Cancer

Because of its linkages to smoking, people afflicted with lung cancer – the leading cause of cancer-related deaths among men and women – not only suffer physically, but also from a lack of empathy.

# A breath of fresh air

## Efforts aim to de-stigmatize a deadly disease

Imagine learning you have cancer and that your prognosis is poor.

Now imagine being told, “well, you deserve it.”

Unfortunately, this is the attitude that many lung cancer patients face. In fact, according to recent research and medical experts, stigmatization of the disease has an enormous impact on diagnosis, treatment and research.

This stigmatization adds to the isolation that people with lung cancer feel “at a time when they need support and compassion,” says Colleen Savage, CEO of the Cancer Advocacy Coalition of Canada (CACC).

“I think media feeds into that stigma, portraying lung cancer as self-inflicted,” says Dr. James Gowing, hematologic oncologist and co-chair of the CACC. “Anti-smoking advertisements increase the perception that those who smoke deserve to die.”

But Dr. Gwyn Bebb, a medical oncologist with the Tom Baker Cancer Centre in Calgary, says, “At least half my patients are non-smokers when I treat them.” He notes that up to 15 per cent of lung cancer cases are diagnosed in lifelong non-smokers, with 35 per cent diagnosed in those who have quit smoking for at least three years.

The stigmatization of the disease also affects detection, which in turn affects survival rates. Hailee Morrison, executive director at Lung Cancer Canada, says, “Patients don’t know enough about the possible symptoms of lung cancer, and this prevents early detection. Coughing, shortness of breath, fatigue, upper

lung cancer,” says Ms. Morrison. “But we don’t blame people who have engaged in other risky behaviours.”

Dr. Bebb concurs, adding, “I have always played rugby, and I expect the health care services to treat me, even if [an injury] is a consequence of a personal activity.”

Adding to the heavy burden of stigma is the notion that smokers have a choice to quit smoking. That is only partially true.

“Nicotine is really the most addictive substance we know of,” Dr. Gowing says. “In fact, studies have found that it is more addictive than heroin.”

Changing attitudes will save lives, and the stakes are high. Lung cancer is the leading cause of cancer deaths worldwide, and in 2009, the prevalence of lung cancer in Canada was 23,400 cases.

While about 5,400 people died of breast cancer in 2009, lung cancer claimed the lives of 20,500 Canadians.

Doctors, scientists, volunteers and agency workers are working hard to improve survival rates, but these efforts require funding. The stigmatization of lung cancer and low survival rates make it very challenging to raise funds for this critically important research.

While some cancer awareness campaigns have raised \$5 million in one city in a single weekend,

back or arm pain, chronic bronchitis and coughing up blood can all be symptoms.”

Some patients are reticent to reveal even to their doctors that they smoke, so doctors may not associate symptoms with early-stage lung cancer.

“We certainly recognize that smoking is a leading cause in



### research

#### Modest dollars breathe life into powerful R&D

In the realm of R&D, \$160,000 might sound like a paltry sum. But for Dr. Gwyn Bebb, it was all he needed to plant the seeds of an initiative now bearing rich results.

The resulting Glans-Look Lung Cancer database allows researchers to link the study of tumour material with clinical information on lung cancer patients. According to Dr. Bebb, this has led to significant improvements in:

- the study of specific molecular markers in lung cancer tissue, to attempt to identify what is responsible for some lung cancers responding very well to treatment and others being resistant;
- the advancement of novel approaches such as textural imaging to analyze lung cancer under the microscope;
- new research opportunities in potential lung cancer treatments, including a virus that attacks cancer cells; and
- studies of supportive services in lung cancer, including the role of exercise and the effects of psychological stress.

“We are congratulating ourselves that we held a fundraiser that raised \$160,000 for lung cancer,” says Dr. Bebb.

Ultimately, research capacity comes down to dollars and cents. “Research dollars available for lung cancers are approximately 10 per cent of those allocated to breast cancer, for example. We don’t want to take away anything from breast cancer. Instead, our challenge is to emulate the support that breast cancer has received in recent years, so we can learn a lot more about lung cancer, so more patients will survive.”

“There has to be a lot more work done for public awareness around lung cancer,” says Ms. Morrison. “When we look back 15 years ago, to the stigma associated with AIDs at that time, we can see the change created through increasing awareness and understanding. Whether or not they smoke or used to smoke, people with lung cancer are deserving of our best possible care and support.”

“People suffering from lung cancer don’t [tell friends and family] because they fear the stigma,” says Dominique Massie, executive director of the Quebec Lung Association. “It is urgent that the public become aware that 50 per cent of people who are diagnosed with lung cancer are non-smokers.”

She would also like more Canadians to be aware of the inequity of access to treatment between provinces, she says. “If I had a loved one with lung cancer, I’d advise them to move to British Columbia.”

online? visit [www.lungcancercanada.ca](http://www.lungcancercanada.ca) for more information.

### PATIENT PROFILE

## Quebecer’s cancer battle reveals access to care disparities

Louis-André Carli, a former architect, was newly retired and renovating his house when he developed a dry, stubborn cough.

A visit to his doctor was followed by an X-ray, and when Mr. Carli saw the X-ray he knew immediately something was wrong. After pneumology tests confirmed it, he received the devastating diagnosis: lung cancer.

In his 20s, Mr. Carli had been a smoker. He quit smoking completely when he was 43, and then led a rigorously healthy lifestyle.

Lung cancer is the most invasive form of cancers, with a bad survival prognosis. But because his overall health was good, Mr. Carli reacted positively to his first round of chemotherapy.

“I received what is considered ‘the standard treatment,’” Mr. Carli says. After doing some

research and reading an article by Dr. Normand Blais, a respected Quebec hemato-oncologist, he learned that other molecules with lesser side-effects are approved for treatment of lung cancer but are not necessarily offered to patients

in Quebec because of the drug approval process in the province.

“We were shocked and angry,” says Guylaine Leduc, Mr. Carli’s wife. “Why should some cancer patients have access to those treatments but not others?”

Oncologists are aware of the alternatives, and it sounds like they cannot discuss them freely with their patients,” she says. “Their hands are tied.”

Mr. Carli praises Quebec health care, while maintaining

that doctors are in a very delicate position. He feels that doctors would like to use the Health Canada-approved treatments, but are reluctant to openly criticize the Quebec government.

Mr. Carli underlines that, because it can be correlated to smoking, lung cancer doesn’t attract as much natural sympathy as do other forms of cancer. Yet who can be sure he has never been exposed to some kind of second-hand smoke?

Mr. Carli’s oncologist was pleased to learn that Mr. Carli is launching a petition to raise public awareness, and he is convinced that all actions are important to make people involved in the cause. As for Mr. Carli, he says that he will consider his ordeal not to have been in vain – provided his children quit smoking in the very near future.



While lung cancer is a highly prevalent and lethal form of the disease, depending on a person’s province of residence, accessing new medications can be a serious barrier to the best care available.

PHOTO: ISTOCKPHOTO.COM

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Lung cancer is  
the leading cause of  
cancer mortality  
in Canada.

# Treatment advances helping target specific disease forms, prolong life

With new advances in both screening and treatment options, lung cancer patients are now surviving longer.

"We are in the middle of a revolution in our approach to treating lung cancer," says Dr. Sunil Verma, medical oncologist at Sunnybrook Odette Cancer Centre, and assistant professor at the University of Toronto. "The arsenal of weapons has been growing tremendously over the last 10 years, and treatment advances have been especially remarkable in the past three years."

Dr. Verma notes that new chemotherapies and oral drugs allow doctors to target specific types of lung cancers and thereby offer a specific personalized treatment plan for patients.

Determining what kind of treatment a patient receives depends on the type and subtype of cancer that the patient has. This is referred to as histology, which is the process of identifying microscopic structures in cancer cells. Lung cancer is divided into small cell and non-small cell carcinomas, but concisely identifying an individual's disease is much more complex.

Dr. James Gowing, hematologic oncologist and co-chair of Cancer Advocacy Coalition of Canada (CACC), stresses, "It is really important to understand that lung cancer is not one disease; in fact, there can be hun-

## knowledge

### Questions to ask your doctor

A diagnosis of lung cancer is a tremendously challenging experience under any circumstances, but having a list of questions to ask your doctor can help ensure you get the very best treatment for you.

- 1 **What type of lung cancer do I have, and what stage is it?**
- 2 **What treatments do you recommend for my type of cancer?**
- 3 **What are the side-effects of the treatment?**
- 4 **If I have early stage lung cancer, should I have adjuvant chemotherapy?** (In order to improve outcome and reduce the mortality rate for early stage lung cancer, chemotherapy is being integrated into the care of these patients after surgery - this is called adjuvant chemotherapy. Adjuvant chemotherapy is already being used in other cancers such as breast and colon cancers.)
- 5 **How will I know if the treatment is effective?**
- 6 **Are there any ongoing clinical trials that I might be a candidate for?**
- 7 **Are there any support groups or resources to help me and my family?**

*Adapted with permission from Lung Cancer Canada.  
For more important information, please visit [lungcancercanada.ca](http://lungcancercanada.ca).*

dreds of types of lung cancer. Just as with breast cancer, we can determine the markers and can discover how different markers will respond to treatments options." (Markers are hormones, proteins or parts of proteins that are made by a tumour or by the body in response to a tumour.)

Before the year 2000, all non-small cell lung cancers were treated much the same, adds Dr. Verma. We've since entered the era of personalized medicine, in which information about an individual patient and their disease is used to tailor individual treatment. "Today, we no longer use a one-size-fits-all approach," he says.

"We have more and better surgical treatments, including minimally invasive lung cancer surgery; better radiation techniques, including more focused radiation (stereotactic radiation); and better systemic (drug) therapies, including better targeted therapies for lung cancer," says Dr. Natasha Leighl, medical oncologist and president of Lung Cancer Canada.

Significant diagnostic advancements have also facilitated the detection of lung cancer in its early stages, which medical experts maintain is critical to successful treatment. Last month, the National Cancer Institute (NCI) released initial results from a large-scale test of screening methods used to detect can-

cers at earlier stages in high-risk patients. Using low-dose helical computed tomography (CT) scans, versus standard chest X-rays (the usual protocol for detecting lung cancer), the trial found 20 per cent fewer lung cancer deaths among those trial participants screened with CT scans.

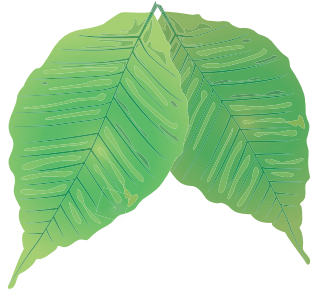
Given that lung cancer is the leading cause of cancer mortality in Canada - surpassing colon, prostate and breast cancer combined - the potential impact on survival rates is significant.

After diagnosis, however, experts report that doctors are not always discussing every treatment option with their patients, in some cases because the drug treatment may be expensive and provincial health care systems may not cover the cost.

Despite these barriers, "It is the moral and legal duty of doctors to discuss all treatment options with their patients," says Dr. Gowing.

Dr. Leighl advises patients who have been diagnosed with lung cancer to press their doctor for thorough details about their specific disease, as well as their prognosis and all treatment options.

She also says that understanding the type of lung cancer, the stage of the cancer, as well as the treatment options and associated side-effects empowers those with a diagnosis of lung cancer to choose the best treatment available.



## LUNG CANCER CANADA

*Awareness. Support. Education.*

**Lung Cancer Canada** is the only charitable organization dedicated to providing access to education for patients and caregivers, increasing awareness about the importance of Lung Cancer as a significant and rising health issue among Canadians.

Lung Cancer kills more people each year than breast, prostate and colorectal cancer combined. Lung Cancer Canada is working to provide a voice for those affected by lung cancer. Most are unaware of the high incidence and mortality rates of this disease and the need for early detection programs, and research that leads to better treatments.

*"In the medical and scientific communities, we continue to research and enhance our understanding of lung cancer biology, so that we may improve early detection, prevention and treatment strategies in this disease. Our goal is to make lung cancer a preventable and curable cancer for all."*

**Natasha B. Leighl, MD**

Learn more about Lung Cancer at  
[www.lungcancercanada.ca](http://www.lungcancercanada.ca) or by calling us at **1-888-445-4403**.

**NOBODY DESERVES TO DIE OF LUNG CANCER**