



Fall Edition 2013

# **Radon Gas - The Silent Killer**

Janet and Alan Whitehead

Radon gas is one of the most deadly and overlooked health risks today. Few people know that radon is the leading environmental cause of lung cancer. It has the highest mortality rate of all the environmental exposures.

Radon is a naturally occurring, radioactive gas created from the decay of uranium in minerals present in rock, soil and water. Radon is present in every indoor environment – i.e. homes, schools and workplaces; the question is to what degree. You cannot see, smell or taste radon, therefore the only way to know the radiation level you are being exposed to is to conduct a simple radon test.

Radon is extremely radioactive. It emits alpha radiation as it decays. Once inside the lungs, radon decay products can genetically damage delicate tissues – this can lead to the development of lung cancer.

Unfortunately, most Canadians are unaware of radon gas and the significant health risk it poses. The Environmental Protection Agency (EPA) and US Surgeon General estimate that approximately 21,000 lung cancer deaths are attributable to radon exposure every year in the USA. Health Canada recently increased its estimate of radon induced lung cancer deaths to approximately 16% of all lung cancers or approximately 3,200 Canadians that die annually from radon exposure. The World Health Organization (WHO) similarly estimate around 14% plus of all lung cancer deaths globally are radon induced. This represents approximately 189,000 of the 1.4 million people that die annually from this disease.

In 2008 Janet Whitehead was diagnosed with lung cancer at the age of 54 and immediately underwent successful surgery to remove her upper left lobe, one third of her lower left lobe and tumors in her right lobes. Janet had never smoked and subsequently learned that her lung cancer was apparently radon induced.

Janet was exposed to exceptionally high levels of radon gas, in a former home in Ottawa, where the family lived for 5 years. Following Janet's diagnosis and surgery, the family reached out to the present occupant of the house,

to advise them of her situation and their suspicions and encourage them to test the home for radon. The results were alarming with indoor radon concentrations in the living area and bedrooms measuring 3,250 Bq/M3, which is equal to 20 times the Health Canada guideline and 30 times the WHO guideline.

Janet says "had we known about radon when we were living in Ottawa in 1992-97 and that the area is in a geologically high radon potential zone, we would have tested our home for radon and fixed the problem at that time. To put our situation into perspective, exposure to 400 Bq/M3 of radon for 8 hours is considered by radiation scientists to be equivalent to smoking a pack of cigarettes every day. I now worry about my husband and 3 children who were also exposed and I would encourage everyone to test their homes, schools and workplaces for radon. This is one deadly form of cancer which is totally preventable."

The story has a positive outcome – the current occupant of their former home in Ottawa, on receiving their advice, immediately had the house tested and then mitigated, reducing the radon levels to less than 100 Bq/M3 and giving the occupants peace of mind. Janet is determined to be a lung cancer survivor and together with her husband Alan, is an advocate and passionate about raising radon awareness and education in Canada to save lives.



#### **Board of Directors**

**PRESIDENT** 

**Dr Natasha Leighl**Medical Oncologist
Princess Margaret Hospital
Toronto, ON

**T**REASURER

Joel Rubinovich Chartered Accountant Rubinovich Shoib Toronto, ON

**S**ECRETARY

Melissa Schyven Partner Stikeman Elliott LLP Toronto, ON

MEMBERS

Roz Brodsky Lung Cancer Survivor Patient Advocate and Dog Rescuer Thornhill, ON

Anne Marie Cerato Lung Cancer Survivor Patient Advocate Toronto, ON

**Dr Peter Ellis** Medical Oncologist Juravinski Cancer Centre Hamilton, ON

**Dr Michael Johnston** Thoracic Surgeon QEII Health Science Centre Halifax, NS

**Dr Janessa Laskin** Medical Oncologist BC Cancer Agency Vancouver, BC

Clinical Research Associate
The Hospital for Sick Children
Toronto, ON

Lorraine Martelli, MN, RN(EC) Nurse Practitioner St. Joseph's Hospital Hamilton, ON

**Brett Murphy** Manager Lakeridge Health Oshawa, ON Manjit Singh Senior Vice-President TD Bank Toronto, ON

#### **Medical Advisory Panel**

CHAIR

**Dr Michael Johnston**Thoracic Surgeon
OEII Health Science Centre

**M**EMBERS

**Dr Normand Blais** Medical Oncologist Hôpital Notre Dame du CHUM

**Dr Peter Ellis** Medical Oncologist Juravinski Cancer Centre

**Dr Stephen Lam** Medical Oncologist BC Cancer Agency

**Dr Janessa Laskin** Medical Oncologist BC Cancer Agency

**Dr Natasha Leighl**Medical Oncologist
Princess Margaret Hospital

**Dr Yee Ung**Radiation Oncologist
Sunnybrook Health Sciences
Centre

**Dr Paul Wheatley-Price**Medical Oncologist
Ottawa Hospital Cancer Centre

### Honourary Board Members

Catherine Black
Dr Gail E. Darling
Dr WK (Bill) Evans
Dr Margaret Fitch
Ralph Gouda
Peter MacKenzie
Morty Sacks
Dr Frances Shepherd
EK (Ted) Weir
Magdalene Winterhoff

Lung Cancer Canada wishes to acknowledge our community partners:





#### **Patient Resources**

NEWLY UPDATED AND REVISED!
A Patient's Guide to Lung Cancer
is a Lung Cancer Canada
publication designed to meet the
educational needs of lung cancer
patients and their families.
Available in English and French.

# A Pathenty Guide to Lang Great

Lung Cancer Canada Info Sheets
Available in English and French.

- Questions to Ask Your Oncologist When You've Been Diagnosed with Lung Cancer
- Lung Cancer and the Use of Oxygen Therapy
- How to Prepare for Lung Cancer Surgery When You Smoke
- Nutrition and Lung Cancer
- For Patients and Caregivers: Coping and Emotional Support
- Thoracic Surgery for Symptom Control
- Managing Daily Activities: Energy Conservation and Work Efficiency

Managing Shortness of Breath
Produced by Lorraine Martelli, MN, RN(EC),

Nurse Practitioner Lung DST, Juravinski Cancer Program

#### The CD consists of a five part series:

- 1. Introduction/Learning Abdominal Breathing
- 2. Managing an Acute Episode of Shortness of Breath
- 3. Sitting to Standing
- 4. Climbing Stairs
- 5. Respiratory Muscle Exercises
- 6. Relaxation Techniques

Check out the video series link on our homepage.

Call or email Lung Cancer Canada to order material.

Material and resources are free for individual patients and caregivers.

## **Contact Information**

Lung Cancer Canada 10 St. Mary Street, Suite 315 Toronto, Ontario M4Y 1P9

Tel: 416-785-3439 or 1-888-445-4403

Fax: 416-785-2905 (Fax)

Email: info@lungcancercanada.ca

Connect with us from our home page:

www.lungcancercanada.ca

Charitable Registration Number: 872775119 RR0001



## Working Towards Screening and Early Detection in Lung Cancer

# Pan-Canadian Early Detection of Lung Cancer Study

Dr Stephen Lam

In 2011, the U.S. National Lung Screening Trial (NLST) demonstrated that low-dose thoracic computed tomography (LDCT) screening reduces lung cancer mortality by 20%. Back in 2007, when the Pan-Canadian Early Detection of Lung Cancer Study was designed, one of the major questions the study aimed to address was if the large randomized National Lung Screening Trial shows that lung cancer screening is beneficial, how we can implement LDCT screening in the Canadian and other health care systems that is both effective and affordable.

Towards this goal, the study makes use of a model developed by Brock University epidemiologist Dr Martin Tammemagi to help identify who we need to screen by predicting the likelihood that an individual will develop lung cancer in the next three years. After 3 years of follow-up of all the 2,537 participants in eight centers across Canada from coast to coast, the web-based lung cancer risk prediction tool has been found to be extremely accurate in identifying current and former smokers with sufficient risk for LDCT screening.

Using the data from the study, the Pan-Canadian study team developed a second tool that predicts with high accuracy whether or not a nodule that shows up on a LDCT scan has a high probability of being cancerous. The tool will simplify the work for radiologists, respirologists and

thoracic surgeons who must make decisions about CT scan findings and help to reduce the number of needless tests, biopsies or surgery. This landmark study is recently published in the prestigious New England Journal of Medicine.

Capturing the opportunity provided the cross Canada network in Vancouver, Calgary, Toronto, Hamilton, Ottawa, Quebec City, Halifax and St. Johns, Lung Cancer Canada, in partnership with the Terry Fox Research Institute provides funding to enable the national study to offer a third screening CT scan to its 2,500 study participants four years after their first low-dose CT scan to provide additional information on how frequently, and for how long, individuals at high risk for lung cancer should be screened. It will also allow data from the study to more easily be compared with current studies already published, such as the National Lung Screening Trial. The study will be extended to June 2015 from its current June 2013.

Globally, lung cancer is the leading cause of cancer deaths accounting for 1.4 million deaths annually. According to the Canadian Cancer Society, lung cancer is the second-most commonly diagnosed cancer in Canada and the leading cause of death from cancer. On average, 70 Canadians will be diagnosed with lung cancer every day, with an average of 55 Canadians dying from lung cancer every day.

# Donnie MAC Cup at the West Edmonton Mall Ice Palace Raises \$15,000

The inaugural Donnie MAC Cup for Charity hockey game between Team MAC and Team MACSON took place on April 21st in Edmonton. The fundraiser honoured the memory of Don MacMillan, a St. Albert resident who passed away of lung cancer on March 19, 2011 at age 61.

Organized by Derek MacMillan, the Donnie MAC hopes to become an annual event, and given its huge success this year, we are sure they will be back next year!

LCC is extremely grateful to all who supported and played in this exciting match.



# Calling For A Bigger Louder Voice for Lung Cancer in Canada

Those were the voices of people living with lung cancer who attended a Lung Cancer Discussion Session hosted by Lung Cancer Canada this summer.

The session was attended by a wide range of people living with lung cancer - from the more recently diagnosed to those that have been living with lung cancer for 11 years. The youngest attendee was 22.

They all agreed that one of the biggest needs is a bigger, louder voice for lung cancer. It is clear - the face of lung cancer needs to change. They all talked about "The Look". When they tell people about lung cancer, they get "The Look" - part 'did you smoke?', part pity. Lung cancer patients often feel that they have the wrong type of cancer.

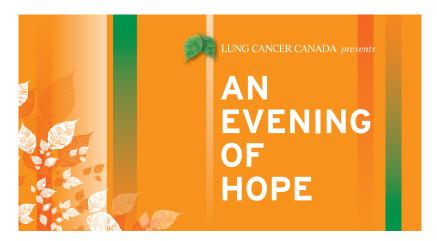
The open discussion spanned a wide range of topics from quality of life to treatment outlook and ideas for

increased advocacy. The evening of sharing carried a message of hope.

Lung Cancer Canada needs to hear your voices. The Discussion Session was only a start. A Canada wide survey that was developed from some of the thoughts coming out of the discussion is being given to other people living with lung cancer so that we can hear more of your voices. Lung Cancer Canada will keep reaching out to you and will continue to listen. We need you to tell us how you would like to be served.

We understand that there is a large need to change attitudes, knowledge, systems and funding for lung cancer. Your ideas and voices will help.

We will continue to develop programs and push to change "the Look". If you have a story or an idea that you would like to share, please feel free to contact us.



# Lung Cancer Canada's Evening of Hope

Celebrating Hope, Survivorship and Major Medical Progress Against Canada's Most Common Cancer

This year the Evening of Hope gala is scheduled for November 14th and will be held at the beautiful Cathedral Church of St. James Convention Centre. The gala is an important fundraising event to celebrate the fight against this disease and to highlight those living with lung cancer. The evening will start with cocktails, great food and mingling amongst the guests, along with good music provided by Joseph Neale, Samara York and Jonathan Brodsky. The evening's main activities will also include two speakers telling of their personal experiences with lung

cancer. This highlights what the Evening of Hope is for – to raise funds to help patients and caregivers, raise awareness of lung cancer among the general public, increase research and to reduce the stigma attached to the disease. Please help us in the fight against lung cancer by coming out to this signature event or by donating to this worthy cause.







## Thank You and Congratulations to All Scotiabank Toronto Waterfront Marathon Participants!

The Scotiabank Toronto Waterfront Marathon occurred on October 20, 2013. Lung Cancer Canada participated in this excellent charity event once again. With the help of runners, walkers and rollers we made this another banner year. The funds raised will help provide resources and information for lung cancer patients and caregivers, in addition to research and advocacy to fight this disease.

This year, with the help of volunteers Lung Cancer Canada operated a water station for the participants of the marathon. This provided Lung Cancer Canada an opportunity to help and thank the participants that have raised funds for our charity. Any success that Lung Cancer Canada enjoyed from this event was due to all the people that have given their time and support to the cause.

# An Exhilarating Feeling Judith Cole

Juditii Cole



Judith Cole at marathon

I, a never-smoker, had been a runner for about 30 years when I was diagnosed with colon cancer and bronchioloalveolar carcinoma in 2008. Returning to running, swimming and cycling six weeks after colon surgery was fairly easy. However three months later, after a right lobectomy, returning to my usual activities was a challenge. My body was very different. On my

first attempt at running about 7 weeks after the second surgery, I discovered that I couldn't even run to the end of the block.

Nevertheless, I was determined to see if I could run again. I began a 10-month journey back to running 5 km without stopping. I went out diligently twice a week, and gradually, I began to run a block or two without stopping, and then it was a half a kilometre, and then a kilometre, and then more.

Five days before the first anniversary of my lung surgery, I ran 5 km without stopping. I had not realized how important it was for me to achieve my goal until I found myself telling everybody I knew about it. I walked around with a huge smile on my face that day.

I'm a dedicated runner, but I don't care about my time. I run for my own health. Today, in the Scotiabank Waterfront event, with the sun coming up on a clear and cool day, a perfect day for running, I felt exhilarated. I let the energy of the crowd and thoughts of two friends recently diagnosed with cancer sweep me along.

#### Editor's Note:

Judith ran the 5K event in 37 minutes and 20 seconds. She placed 3058 out of 6487 participants, finishing in the top half of all those that completed the event! As she says, "not bad for a 64 year old woman who is missing part of a lung!"



Thank you to everyone that helped to make the event a success!



Coming in for the finish.



Raising funds and awareness for lung cancer.



Thank you to all the volunteers!



A great day and a great cause!





MEN AND

**Lung Cancer Canada presents** 

# A Patient's Guide to Lung Cancer



CLIDICAL TITIOS

WHY PARTICIPATE IN A CLINICAL TIBAS:

Why pas are in a shared for the complete and pass notes and first offer hyper shared to the complete and the complete shared to the complete shared to

A Patient's Guide to Lung Cancer

Available in English and French Coming soon in other languages including Chinese

#### What's new:

- Updated information on prevalence, causes, symptoms, diagnosis, and stages of lung cancer
- Latest treatment options
- Tips on living with lung cancer
- Tips on symptom management
- Information and links to other Canadian lung cancer resources

Lung Cancer Canada is a national charitable organization and the only one dedicated to lung cancer in Canada. Lung Cancer Canada aims to increase awareness for lung cancer, support patients and the individuals who care for them, and provide educational resources to patients, family members, healthcare professionals and the general public.

To obtain your copies call **1-888-445-4403** or email **info@lungcancercanada.ca** 

