Report on Lung Cancer Screening

What is Lung Cancer?

Lung Cancer is a serious disease caused by cells that are \textit{not normal} and that can spread to one or many parts of the body. Lung cancer is a group of more than 100 diseases that starts in the lungs, and is thought to develop over many years.

Lung Cancer: How common is it?

Lung cancer is the second most common cancer in both men and women. It accounts for about 14\% of all new cancer and it mainly occurs in older people. For smokers the risk of developing lung cancer is \textit{much} higher. Lung cancer is the leading cause of cancer deaths among both men and women in the USA and it accounts for about 1 in 4 cancer deaths per year.

St. Lawrence County: Lung Cancer Rates
There are two main types of Lung Cancer: Small Cell and Non-Small Cell

**Small Cell Lung Cancer (SCLC)**: SCLC usually starts near the center of the chest in the bronchi. It’s a fast-growing form of cancer that tends to spread in its early stages. It tends to grow and spread much faster than NSCLC. SCLC is rare in nonsmokers.

**Non-Small Cell Lung Cancer (NSCLC)** makes up 85-90% of all lung cancers diagnosed, and there are three types of NSCLC:

- **Adenocarcinoma** is a slow-growing lung cancer usually discovered in an outer area of the lung, often before it has a chance to spread. It occurs more often in smokers, but it’s the most common form of lung cancer in nonsmokers as well.
- **Squamous cell** carcinoma generally occurs in the center of the lung. It tends to develop in smokers.
- **Large cell** carcinoma occurs anywhere in the lung, and it usually grows and spreads at a rapid rate

**What are the Symptoms of Lung Cancer?**

Early stage lung cancer doesn’t usually produce obvious symptoms. As the cancer progresses, there may be:

- shortness of breath
- coughing
- coughing up blood
- chest pain

Other symptoms may include:

- fatigue and weakness
- loss of appetite and weight loss
- hoarseness
- difficulty swallowing
- pain in the bones and joints
- swelling of the face or neck

**What causes Lung Cancer?**

A number of risk factors can increase your chances of developing lung cancer.

1. Smoking **Cigarettes** or being exposed to **secondhand smoke** is a primary risk factor for the disease. About 80% of lung cancer deaths are linked to smoking.
2. **Cigar** smoking and **Pipe** smoking also cause lung cancer
3. Exposure to asbestos and certain paints (lead fumes) may also increase your risk.
4. **Radon**, a naturally occurring radioactive gas that results from the breakdown of uranium in soil and rocks, may also cause lung cancer. **Radon** cannot be seen, tasted or smelled. According to the EPA, **Radon** is the second leading cause of lung cancer and is the leading cause among non-smokers
How do we treat NSCLC?

Treatment for NSCLC can vary, based on the stage of disease, your health, and other factors. Early stages of NSCLC may be treated with surgery. Removal of a lobe or larger part of the lung may be necessary, and in some cases removal of the entire lung may be required.

Chemotherapy uses medications to help kill cancer cells. It’s taken orally or given intravenously (through a vein). This allows the drugs to travel through the bloodstream and kill cancer cells throughout the body.

Radiation Therapy uses high-energy x-rays (photons) or (electrons) from a machine called a Linear Accelerator to kill cancer cells and ease pain and other symptoms. It is target-specific to the disease site.

Lung Cancer Screenings at CPH

Canton-Potsdam Hospital offers the only certified lung cancer screening program in St. Lawrence County, and is the only program listed on the National Registry.

- Screening is the use of tests or exams to find a disease in people without symptoms of that disease. At Canton-Potsdam Hospital we use Low-dose computerized tomography or CT to screen for lung cancer.

To be screened the following criteria are recommended but not limited to:

- Age 55 – 77 years;
- Asymptomatic (no signs or symptoms of lung cancer);
- Tobacco smoking history of at least 30 pack-years (one pack-year = smoking one pack per day for one year; 1 pack = 20 cigarettes);
- Current smoker or one who has quit smoking within the last 15 years; and
- Receives a written order for LDCT lung cancer screening

What do patients need to know?

- If you fit all the criteria for lung cancer screening, you and your health care provider should talk about whether you want to be screened. You should talk about what to expect at the time of screening.
- It’s important to find out if your health insurance will cover the cost of annual low-dose CTs for lung cancer screening
- Screening is not a good alternative to stopping smoking. If you smoke, you should get help to quit.
Lung cancer screening data

• In 2015 there were 7 screenings performed. All 7 patients screened were offered smoking cessation. Of the 7 screened 1 was categorized as abnormal interpretation where additional studies were recommended.

• In 2016 there were 121 screenings done. All 121 patients screened were offered smoking cessation. Of the 121 screened 6 were categorized as abnormal interpretation where additional studies were recommended.

• In the first three months of 2017 there have been 37 screenings performed. All 37 patients were offered smoking cessation. Of the 37 screened 18 were categorized as abnormal interpretation where additional studies were recommended.

• **Smoking Cessation Info:**

  Dr. Frederic Seifer, pulmonologist, CPH Pulmonology Practice: 315-261-5990

  [www.nysmokefree.com](http://www.nysmokefree.com) or call 1-866-697-8487

• If you are interested in obtaining a lung cancer screening please contact your primary care physician and they can manage an appointment for you.