



COMMITTED TO YOUR HEALTH

Lung Cancer Awareness Month

About Lung Cancer

LVNG With Lung Cancer is here to give support and information every step of the way. In this section, you can learn about lung cancer, the risk factors and symptoms, how it's diagnosed, how it may progress, how it's treated, and how to work closely with your doctors and nurses. This section is meant to provide a better understanding of how to live with lung cancer.

An overview of lung cancer and what it does to the body

Our bodies are made up of trillions of cells. When our cells get old or damaged, they die and are replaced by new cells. Cancer occurs when old or damaged cells don't die and new cells reproduce. These extra cells may then build up and form tumors. Cells can change, or mutate, for different reasons. Mutations can

be passed down from parents to children or they can result from exposure to certain things known to cause cancer, like smoking, certain chemicals, overexposure to the sun, and other pollutants and gases. And, although there are numerous risk factors that may cause cancer, it can also develop for unknown reasons.

How Lung Cancer Starts

Lung cancer starts in the cells of the lung, and as it progresses, it can grow into surrounding structures, and spread into the body's small, bean-shaped masses of tissue called lymph nodes that surround the bronchi. The lymph nodes are part of the lymphatic system, which helps to filter out harmful substances in the body. When cancer cells are found in the lymph nodes, there's a chance that the cancer may be in other places



YELM FAMILY MEDICINE, PLLC

IN THIS ISSUE

Veteran's Day Parade

Date and Time

Sunday Nov 10, 2019

Location

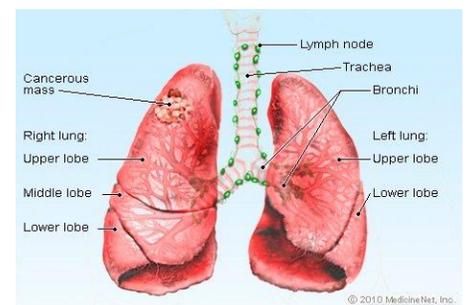
100 SW Veterans Way, Chehalis, WA 98532

Website

<http://www.VeteransMuseum.org>

Contact Information

360-740-8875



in the body as well. Each [stage of lung cancer](#) is determined by the size of the tumors, and if or where they have spread to within the body. Getting diagnosed with lung cancer can be unexpected.

However, receiving a lung cancer diagnosis is the first step to being able to treat it. A lung cancer diagnosis may be determined after undergoing a

cancer [screening](#). If a screening shows something that's concerning, your doctor will do more tests to investigate. This way, the team can make a more accurate diagnosis and, if need be, get treatment started.

Finding an oncologist immediately after diagnosis is important, because you'll [work together](#) to get started on the best possible treatment plan to keep your cancer from spreading. Keep in mind that finding the right oncologist and treatment team may take some time, so it's a good idea to start your search right after diagnosis.

Tests to Detect Lung Cancer

Chest X-ray

Doctors use high-energy beams to get a picture of the inside of the lungs. If they see something that looks concerning, they will

recommend other tests to determine if what they are seeing is cancer.

Computed tomography (CT) scan

This test is also known as a CT scan. This scan provides doctors with much useful information, such as where a tumor is located, how big it is, and if the cancer has spread. Having a CT scan is like having an X-ray. It lasts a little bit longer because it takes lots of pictures from many different angles. The CT scanner takes these pictures by moving in a circular motion around the whole body.

Low-dose CT scans

A low-dose CT scan, or a LDCT, is a screening tool. They work like X-rays, but use less radiation than CT scans. [Learn if lung cancer screening is right for you.](#)

Traditional X-rays can locate tumors that are about an inch wide, but low-dose CT scans can find lung cancer that's a fraction of the size. This is important, as the smaller the tumor, the more likely it's at an early stage, which means it's less likely to have spread to other parts of the body.

Sputum cytology

A sputum cytology test may be used to determine if tumors are growing in the airways, which are the tubes that carry air in and out of the lungs. All this test involves is collecting sputum (or mucus) that is coughed up. Usually, 3 samples of sputum over 3 days are required. The sample is put under a microscope to see if there are any abnormal cells. If lung cancer cells or tumors are found through these tests, doctors will perform different types of tests to get a clearer understanding of the cancer.

Tests to Learn More About Lung Cancer Biopsies

A biopsy is a way for doctors to examine cancer cells and tumors more closely. A small tissue sample is removed by either a needle, a long thin tube, or surgery. Doctors can then view the sample under a microscope.

Biomarker tests for stage 4 lung cancer

Once a sample is gathered from a biopsy, it can be used in what's called a [biomarker test](#).

Biomarker testing goes by many names. You may hear it referred to as: mutation testing, genetic testing, molecular testing, or

genomic testing. This test is usually given to people with more advanced lung cancer, also called metastatic lung cancer. It looks for specific differences in the cancer cells and can help determine the appropriate treatment for the type of cancer you have.

Biomarkers indicate changes in our molecules or genes that can be a sign of cancer. One of the goals of biomarker testing is to understand more about the type of lung cancer you have. Testing lung cancer for biomarkers can help you and your doctor find the best treatments to stop cancer from growing and spreading. If lung cancer tests positive for a biomarker, you and your doctor may discuss **targeted therapies**. These are treatments that work on certain types of cancer to block the growth and spread of cancer cells.

When it comes to getting a complete diagnosis of metastatic lung cancer, keep these three steps in mind:

TEST: Test for all common biomarkers that could be causing your cancer to grow and spread.

KNOW: Test results may take some time. By knowing all of your biomarker test results, you and your doctor can make the right treatment decision for your specific type of lung cancer.

TREAT: Biomarker test results can help you and your doctor determine what treatment may be right for you.

Here are biomarkers you may be tested for if you have metastatic lung cancer:

- Programmed death-ligand 1 (PD-L1)
- Epidermal growth factor receptor (EGFR)
- Kirsten rat sarcoma (KRAS)
- ROS proto-oncogene 1, receptor tyrosine kinase (ROS1)
- Mesenchymal-epithelial transition (MET)
- Anaplastic lymphoma kinase (ALK)
- B-Raf proto-oncogene, serine/threonine kinase (BRAF)
- Neurotrophic tyrosine receptor kinase (NTRK)

Knowing about cancer's biomarkers is an important step in

determining the right treatment options. The National Comprehensive Cancer Network[®] (NCCN[®]) is an alliance of 28 leading cancer centers devoted to patient care, research, and education. NCCN recommends (Category 1) that eligible patients with metastatic non-squamous NSCLC get tested for EGFR and ALK biomarkers before starting their first treatment, if clinically possible.*†

Take action

When it comes to your treatment plan, it's important to be involved with your treatment team. While everyone's lung cancer journey is different, a treatment plan can only be successful if it is right for you. Once you have received your biomarker test results, you'll work with your treatment team to get a deeper understanding of all your **treatment options**.

