

LUNG CANCER

A Guide for Patients & Caregivers

FROM THE LUNG CANCER PROGRAM AT THE SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER



When you or a loved one is diagnosed with lung cancer, it's natural to feel overwhelmed.
You have many questions to ask and decisions to make.
But **you are not alone** in your struggle.

SYMPTOMS

DIAGNOSIS

TREATMENT

WHAT IS LUNG CANCER?

Lung cancer is the development of abnormal (malignant) cells in the tissues of the lungs – spongy, cone-shaped organs in the chest that help you breathe.

- Lung cancer is the **second most common** cancer in men and women.
- **Smoking** is the main cause of lung cancer. Up to **90 percent** of lung cancer deaths are linked to smoking.
- Older people are **more likely** to develop lung cancer. According the American Cancer Society, about 2 out of 3 people diagnosed with lung cancer are **65 or older**.

**second
most
common
cancer**

SYMPTOMS OF LUNG CANCER

The most common symptoms of lung cancer include:

- **CHRONIC COUGH:** You may complain of a cough that won't go away; a chronic cough lasts for at least eight weeks.
- **REPEATED RESPIRATORY INFECTIONS:** Lung tumors can block the airway, causing frequent infections such as bronchitis and pneumonia.
- **COUGHING UP BLOOD:** Even if it's just a small amount of blood, coughing up blood or bloody mucus is a reason to call your doctor.
- **SHORTNESS OF BREATH:** Lung cancer can cause the airway passage to narrow, which leads to difficulty breathing.
- **HOARSENESS:** Chronic coughing or a tumor that interferes with the vocal cords may cause you to have a raspy voice.
- **CHEST PAIN:** When a lung tumor presses on nerves, you may feel pain in your chest, especially when breathing deeply, coughing or laughing.



SHOULD YOU BE SCREENED?

Early detection is key to diagnosing and treating lung cancer before it spreads. Studies show that **screening reduces lung cancer deaths by 20 percent** in patients with a high risk of developing the disease.

People considered at high risk for developing lung cancer:

- ◇ Heavy smokers (at least a pack a day for 30 years)
- ◇ Current smokers or former smokers who quit within the past 15 years.
- ◇ Between the ages of 55 and 74 years old.

If your doctor detects anything abnormal during a lung cancer screening, diagnostic tests such as imaging scans and biopsies are the next step.



HOW IS LUNG CANCER DIAGNOSED?

Catching lung cancer early and treating it quickly leads to the best hope of beating the disease. But most often, lung cancer does not show signs and symptoms until it is in an advanced stage and harder to treat. Lung cancer screening – a test that looks for cancer before you have symptoms – offers hope for early detection, when surgery is a potential cure.

Diagnostic tests and procedures include:

- **IMAGING PROCEDURES:** These scans are detailed pictures of your chest and lungs. The physicians reading these scans are all expert lung cancer specialists, with a depth of expertise in analyzing lung imaging.
Imaging procedures include:
 - Computed tomography (CT) scan
 - Chest X-ray
- **NEEDLE BIOPSY:** This procedure usually involves the doctor passing a needle through the skin into the lungs to remove a small piece of tissue.
- **BRONCHOSCOPY:** Your doctor inserts a thin, lighted tube through the mouth or nose and down the throat to look inside the lungs and perform a biopsy (tissue sampling).

GETTING A SECOND OPINION

If you've been diagnosed with lung cancer, you may want a second opinion. **Getting a second opinion** offers you additional expert input on your diagnosis. You'll leave able to make an informed decision about the best treatment options for your type and stage of lung cancer.

TYPES OF LUNG CANCER

The **two most common** types of lung cancer are:

1 NON-SMALL CELL LUNG CANCER

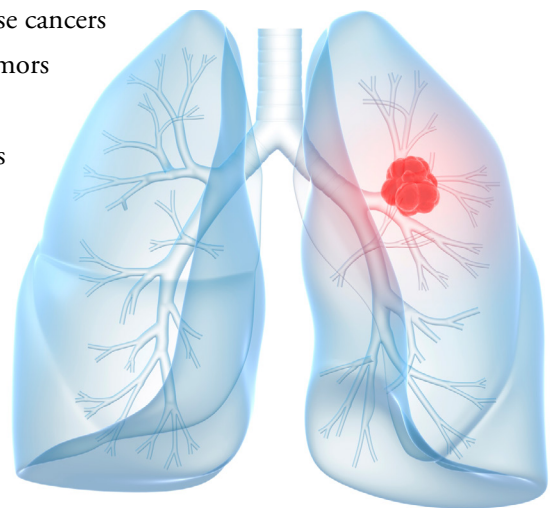
The most common type of lung cancer, non-small cell lung cancer makes up about 85 percent to 90 percent of lung cancer cases.

2 SMALL CELL LUNG CANCER

Also called oat cell cancer, small cell lung cancer makes up about 10 percent to 15 percent of lung cancer cases.

Other types of lung cancers include:

- **CHEST WALL TUMORS:** These rare tumors found in the chest may press against the lung and cause difficulty breathing.
- **LUNG CANCER IN “NEVER SMOKERS”:** About 15 percent of cases occur in people who never smoked.
- **MESOTHELIOMA:** These rare tumors of the lining of lungs are often linked to asbestos exposure, representing approximately 5 percent of lung cancer cases.
- **METASTATIC CANCER IN THE LUNG:** Cancer that has spread (metastasized) from where it first started to another part of your body is called metastatic cancer.
- **RARE LUNG CANCERS:** These cancers include mediastinal tumors (tumors in the area of the chest between the lungs) and carcinoid tumors (tumors that start in the lung and spread to the stomach or intestine).



STAGING LUNG CANCER

After your care team confirms a diagnosis, your doctor will perform staging tests to determine how large the tumor is and whether it has spread to other parts of the body. Staging helps doctors determine the most appropriate, effective treatment and care plan.

FIRST, your doctor will stage your lung cancer using the TNM staging system.

The TNM staging system includes:

T (TUMOR)	N (LYMPH NODES)	M (METASTASIZED)
Identifies the size of the original tumor.	Indicates if the cancer has spread into the nearby lymph nodes.	Signals whether the cancer has spread (metastasized) to other parts of the body.

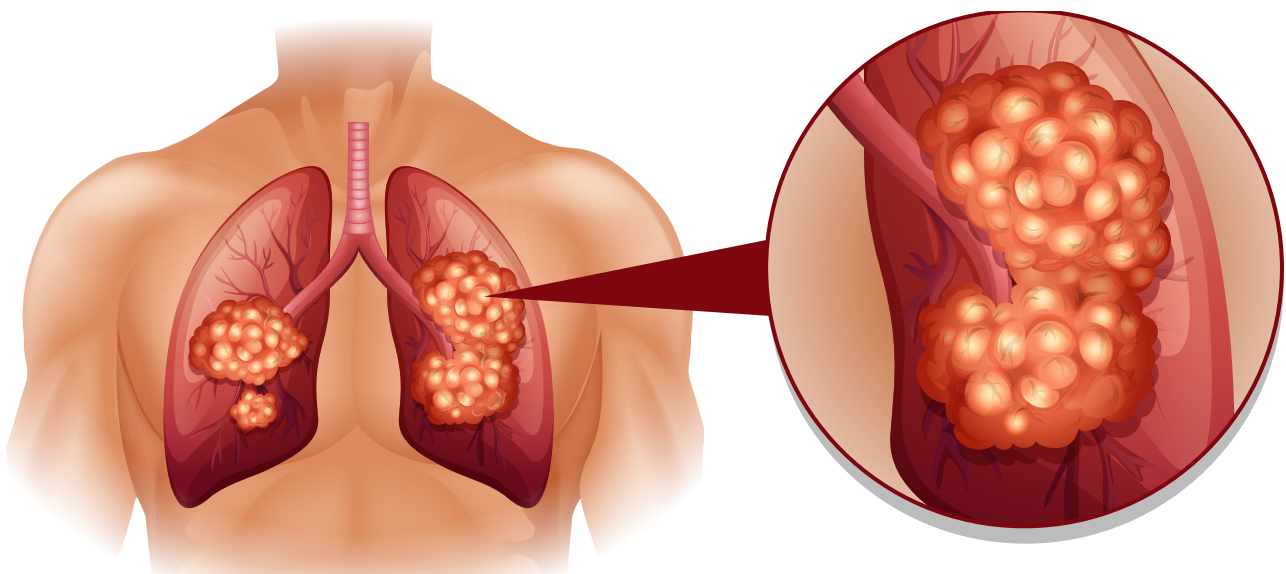
THEN, your doctor will provide additional detail depending on the type of lung cancer.

Non-small cell lung cancers stages range from I to IV depending on the growth and spread of the lung cancer:

STAGE I	STAGE II	STAGE III	STAGE IV
The cancer is located in the lung.	In addition to the lung, the tumor has spread to the diaphragm.	At this point, the cancer has also now spread to the lymph nodes.	The lung cancer has spread beyond the chest cavity to other parts of the body.

Small cell lung cancer staging includes a two-tiered system:

LIMITED STAGE	EXTENSIVE STAGE
The cancer is confined to the lung or nearby tissue.	When the cancer spreads to the other lung or other distant organs, it is considered in the extensive stage.





TREATING LUNG CANCER

Your treatment plan should be unique to your type and stage of cancer, as well as your individual health needs.

There is a full range of effective cancer treatment options, including:

- **Minimally invasive** surgical procedures
- Interventional **pulmonology**
- **Personalized** chemotherapy
- Emerging cancer therapies such as **immunotherapy** and **epigenetic therapy**
- **Targeted** radiation
- **Promising** clinical trials

QUESTIONS TO ASK YOUR DOCTOR

When you prepare a list of questions in advance of your appointment, it may help ease your anxiety heading into your visit. You can also note any symptoms or side effects you may have, so that you can share those with your doctor, too.

Questions to ask may include:

- ✓ What stage is my lung cancer?
- ✓ What are my treatment options for my type and stage of lung cancer?
- ✓ Which treatments do you recommend?
- ✓ Are clinical trials an option for me?
- ✓ What are the side effects of treatment and how can they be minimized?
- ✓ What results do you expect?

HEALTHY HABITS THAT HELP DURING TREATMENT

When you're fighting cancer, a healthy lifestyle can help you stay well during and after treatment. Research suggests that good nutrition, exercise and other healthy behaviors may improve your quality of life during treatment.

The top five healthy habits that can help support your wellness during and after treatment include:

1



STOP SMOKING

Even if you've been diagnosed with lung cancer, there are immediate rewards when you quit smoking, such as lower risk of chronic disease and improved lung and respiratory function.

2



EAT WELL

Good nutrition is important for lung cancer patients. Eating the right kinds of foods can help you feel better, stay stronger and fight infection.

3



BE ACTIVE

Physical activity can help reduce fatigue, improve mood and maintain a healthy weight. Even short bouts of activity such as gentle walking or light stretching will give you benefits.

4



ENLIST SUPPORT

Beyond your physical health, it is essential to address your mental health and emotional needs. You may want to talk with a counselor or other cancer patients who understand what you're going through.

5



MANAGE YOUR CARE

Whether it's you or a caregiver who's championing your cancer care, it's important to have someone who is advocating for your health needs.

“

Taking charge of your health by developing healthy habits empowers you to cope better with your treatment and any side effects you may have.”

—Johns Hopkins expert
Lonny Yarmus, D.O.,

COPING TIPS FOR CAREGIVERS

If you're caring for a loved one who's been diagnosed with lung cancer, you've stepped into a role that can be both challenging and rewarding. Some strategies that can help you become a successful caregiver include:

- **ASSEMBLE A TEAM:** You don't have to do this alone. If some of the day-to-day responsibilities become overwhelming, get help from family and friends.
- **PREPARE FOR APPOINTMENTS:** Arm yourself with a list of questions and notes about symptoms and side effects before you visit the doctor. Don't be afraid to speak up during appointments.
- **STAY ORGANIZED:** Keep your loved one's important files accessible, including medical records, insurance information, financial paperwork and other essential items.
- **FIND YOUR OWN SUPPORT:** Join a support group for cancer caregivers where you can talk to people who understand what you're going through and can help you.
- **TAKE TIME FOR YOURSELF:** Take time each day to focus on your own needs. You might use this time to take a walk, read a book, squeeze in a nap or do something that will help you feel refreshed.



SUPPORT PROGRAMS AND SERVICES

Lung cancer treatment is a trying time for you and your family. Whether it's you who's been diagnosed or your loved one, a support system can help you manage the many aspects of lung cancer and its treatment.

There are a variety of support services during treatment, including:

- **Cancer support groups** for you to connect with other cancer patients or caregivers who understand what you're going through.
- **Educational workshops** that offer you and your family guidance in how to cope with lung cancer and its treatment.
- **Spiritual support**, including religious and non-denominational services and opportunities for private meditation.



SUPPORT PROGRAMS AND SERVICES *(continued)*

- **Transportation assistance** to get to and from treatment appointments.
- **Lodging accommodations** if you or your family needs a local place to stay during treatment.
- **Personal care products**, including custom-made wigs, hats and skin care products to help you feel better during and after treatment.



WHO CAN YOU EXPECT ON YOUR LUNG CANCER TEAM?

Physicians on your care team may include:

- **MEDICAL ONCOLOGIST:** A medical oncologist is a doctor who specializes in diagnosing and treating cancer with drugs, including chemotherapy and targeted cancer therapy, as well as new, emerging therapies in clinical trials.
- **THORACIC (CHEST) SURGEON:** A thoracic surgeon is a doctor who performs surgery to remove cancer from the lungs and surrounding parts of the chest.
- **RADIATION ONCOLOGIST:** A radiation oncologist is a doctor who specializes in treating cancer with radiation therapy, which is often used in combination with other treatments like chemotherapy, targeted therapy or surgery.
- **PULMONOLOGIST:** A pulmonologist is a doctor who has advanced training in diagnosing and treating lung and respiratory problems using less invasive interventional pulmonology techniques, such as flexible tubes inserted into your throat to look at your lungs.

OTHER HEALTH SPECIALISTS ON YOUR CARE TEAM

- ◇ **Oncology nurse:** An oncology nurse has additional training in providing care for cancer patients.
- ◇ **Palliative care specialist:** Palliative care specialists help patients manage the symptoms and side effects of lung cancer and its treatment, including pain, nausea and fatigue.
- ◇ **Oncology social worker:** An oncology social worker has experience coordinating support services for patients with lung cancer and their families. They offer assistance in handling health insurance, finances, child care and more.
- ◇ **Dietician:** A dietician with expertise in cancer care helps patients create an eating plan that meets their nutritional needs while minimizing the side effects of cancer treatments, such as problems with digestion.



RESOURCES FROM JOHNS HOPKINS MEDICINE

Learn more about the experts involved in your care.

[Meet our team.](#)

Read more about the [Lung Cancer Program](#) at the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center.

Find out more about [research and clinical trials](#) at the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center.

Patients can be seen by all experts in a single visit to [Johns Hopkins Bayview Medical Center](#).

**MAKE AN
APPOINTMENT**

Or speak to one of
our advisors, call:
410-609-6378