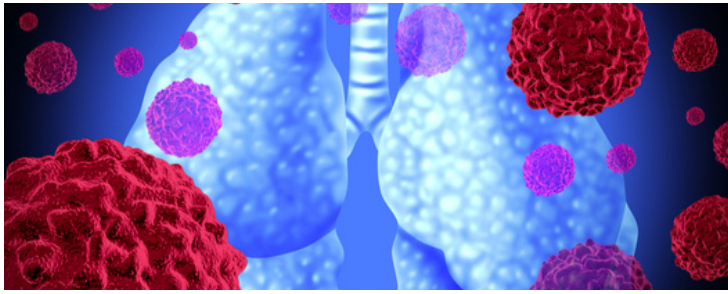


LUNG CANCER

PUBLIC HEALTH BRIEF

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OVERVIEW OF LUNG CANCER ^{1, 2, 5}

Lung Cancer (LC) is a form of cancer that begins inside the lungs. This happens when cells within the lungs mutate (change). Typically, these mutations are a result of exposure to dangerous chemicals that we breathe on a daily basis. However, lung cancer can occur in people with no known exposure to any toxic chemicals, although less common. In 2022, lung cancer accounted for approximately 130,180 deaths in the United States alone, with around 230,760 new cases. Lung Cancer mainly occurs in people 65 and older. Approximately 90% of all lung cancer cases are caused by smoking, as tobacco smoke contains many cancer-causing chemicals. Exposure to hazardous chemicals, radon, environmental pollution, and genetic factors can also play a role in the development of Lung Cancer.

Symptoms are individualized, but the most common include:

- ongoing cough
- shortness of breath
- coughing up blood
- chest pain
- hoarseness
- weight loss

Lung Cancer diagnoses are often broken down into two main groups, Small-Cell Lung Cancer (SCLC) and Non-Small Cell Lung Cancer (NSCLC). SCLC is almost always associated with smoking and can be treated using chemotherapy. It is the more aggressive of the two and often spreads quickly. NSCLC is more common, making up about 80-90% of all lung cancer cases. Only 10-20% of these cases occur in people who have never smoked or smoked fewer than 100 cigarettes in their lifetime. This type typically develops slowly and causes few symptoms until it has advanced. The percentage of people alive 5 years after a lung cancer diagnosis in Maryland is 27%, which is higher than the national rate of 25%. Maryland ranks 12th among 46 states with survival data. Over the last 5 years, Maryland's survival rate has increased by 9%.

TREATMENT OPTIONS ^{1, 4}

Depending on the specific form of Lung Cancer a person has, a certain treatment option may make more sense than others. Options include surgery to remove the tumor along with surrounding lung tissue as long as the cancer is localized and has not spread. Radiation Therapy uses strong radiation x-rays or radioactive implants to kill cancer cells or keep them from growing. Immunotherapy drugs can help your body recognize cancer cells as foreign, allowing your immune system to then fight the cancer. Chemotherapy uses powerful chemicals to kill fast-growing cancer cells. Chemotherapy can also be used after surgery to kill remaining cancer cells.

Sources:

1. American Lung Association. Lung Cancer. <https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/basics>
2. American Cancer Society. Key Statistics for Lung Cancer. <https://www.cancer.org/cancer/lung-cancer>
3. CRISP Reporting Services
4. Maryland Vital Statistics
5. Mayo Clinic. Chemotherapy. <https://www.mayoclinic.org/tests-procedures/chemotherapy>
6. HCHD. Cancer Prevention.

DATA ^{3, 4}

Deaths from Lung Cancer in Harford County

2018	107
2019	120
2020	120

Emergency Department visits from Lung Cancer in Harford County

2018	841
2019	830
2020	714

SPOTLIGHT: PUBLIC HEALTH AND LUNG CANCER ¹

Being healthy goes beyond eating right and staying active, and it begins long before you need medical care. "Health begins where we live, learn, work and play, and it's important to ensure that safeguards are in place to protect us and prevent disease," says Albert Rizzo, M.D., Chief Medical Officer for the American Lung Association.

These public health concerns can affect your lung health:

Tobacco - Smoke and secondhand smoke along with nicotine addiction. E-Cigarettes.

Climate Change - greenhouse gases are creating warmer temperature along with unhealthy ozone and particle pollution.

Obesity Epidemic - being at an unhealthy weight can lead to a multitude of health issues impacting the lungs, including asthma and sleep apnea.

Disease Prevention - proven public health strategies like hand washing and vaccinations can help prevent disease. Despite readily available vaccines for flu and pneumonia, people still don't get vaccinated.

SCREENING ^{1, 2}

Screenings are important in detecting the presence of Lung Cancer in otherwise healthy people with a higher risk for cancer. This process involves a low-dose computerized tomography scan (CT Scan) of the lungs. If detected in the early stages, the death rate can reduce by up to 20%.

Who should get screened?

- adults 50-80 years old who are current or former smokers
- people with a history or family history of lung cancer
- those who have once smoked regularly but have quit
- 20 or more pack years (1 pack a day for 20 years, or 2 packs a day for 10 years)

Screenings are generally not recommended for those in poor health, as you may be more likely to experience complications from follow-up tests.

HARFORD COUNTY ⁶

The Kaufman Cancer Center is located at Upper Chesapeake hospital in Bel Air, MD. The center has a Lung Cancer Treatment Program that specializes in the surgical treatment of lung cancer and disorders of the chest.

The Harford County Health Department offers Lung Cancer Screenings via Low-Dose CT scans at no cost for uninsured men and women who meet eligibility guidelines.