

SMALL CELL LUNG CANCER

What is Small Cell Lung Cancer?

Lung cancer is a cancer that starts in the lungs. There are two main types of lung cancer: small cell lung cancer (also called oat cell cancer) and non-small-cell lung cancer. A physician will diagnose lung cancer as small cell or non-small-cell based on the way the tumor cells look under the microscope. Small cell lung cancer accounts for approximately 25% of all lung cancer. Small cell lung cancer differs from non-small lung cancer by growing rapidly, spreading quickly, and responding well to chemotherapy and radiation. Tobacco smoking is the main cause of both small cell and non-small cell lung cancer.

What are the Risk Factors for Small Cell Lung Cancer?

Risk factors increase a person's chance of getting a disease. However, having a risk factor does not mean you will get the disease. The risk factors for small cell lung cancer include:

- Smoking (including secondhand smoke and hookah smoking)
- Radon exposure, mainly from homes built on soil with natural uranium deposits
- Asbestos exposure, mainly from work exposure in mines, mills, places where insulation is used
- Radiation therapy to the lungs
- High levels of arsenic in drinking water

What are the Symptoms of Small Cell Lung Cancer?

Unfortunately small cell lung cancer tends to grow quickly without any symptoms.
When a tumor grows large enough or

when the small cell cancer spreads to other areas of the body, the following symptoms may develop:

- Cough
- Coughing up blood
- Shortness of breath
- Chest pain made worse by deep breathing

Who Gets Small Cell Lung Cancer?

An incidence rate is the rate at which new cancer cases occur in a population. In California, small cell lung cancer incidence rates have declined over the past two decades. The five-year ageadjusted incidence rate for small cell lung cancer in California is 6.8 per 100,000 population.



Arnold Schwarzenegger, Governo State of California

Kimberly Belshé, Secretary California Health and Human Service Agency

Mark B. Horton, MD, MSPH, Director California Department of Public Health

- Approximately 2,100 new cases of small cell lung cancer are diagnosed each year in California (all races combined).
- Men are more frequently diagnosed with small cell lung cancer than women.
- Incidence of small cell lung cancer peaks between the ages of 55 and 84 years of age.
- Incidence rates of small cell lung cancer are highest in whites.

What are the Treatments for Small Cell Lung Cancer?

The most effective treatment for small cell lung cancer is chemotherapy (using medications to kill cancer cells) alone or in combination with radiation therapy (using high-dose X-rays or other high-energy rays to kill cancer cells). Surgery is not usually a treatment option for small cell lung cancer. The stage at which the cancer is found will help determine the specifics of the treatment.

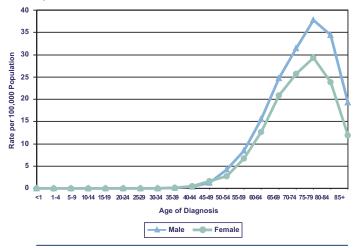
Who Survives Small Cell Lung Cancer?

Survival from small cell lung cancer is usually given as a five-year survival rate. The rate is a measure of comparison between survival in a group of small cell lung cancer patients and a group of cancer-free individuals, and is reported

as a percentage. The survival rate refers to the percentage of patients who live at least five years after being diagnosed with SCLC. Survival from small cell lung cancer is most influenced by the stage at which the cancer is detected. Survival is best when cancer is detected in the early stages, before it has spread.

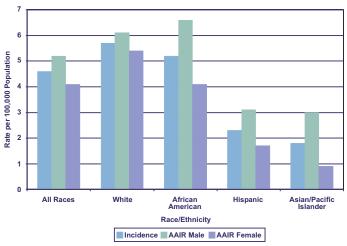
Five-Year Relative Survival (California, 1994-2005)	
Stage I	22.3%
Stage II	20.9%
Stage III	8.4%
Stage IV	1.9%

Five-Year Age-Specific Small Cell Lung Cancer Incidence Rates by Sex, California, 2002-2006



Source: California Cancer Registry, California Department of Public Health.

Small Cell Lung Cancer Five-year Age-adjusted Incidence Rates (AAIR), by Race/Ethnicity and Sex, California, 2002-2006



Source: California Cancer Registry, California Department of Public Health