

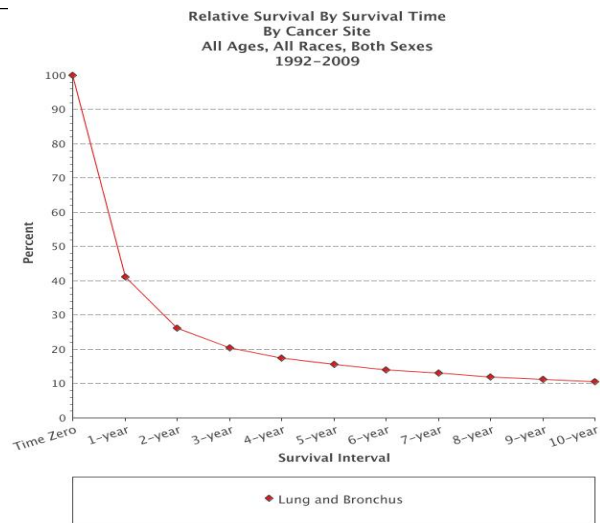
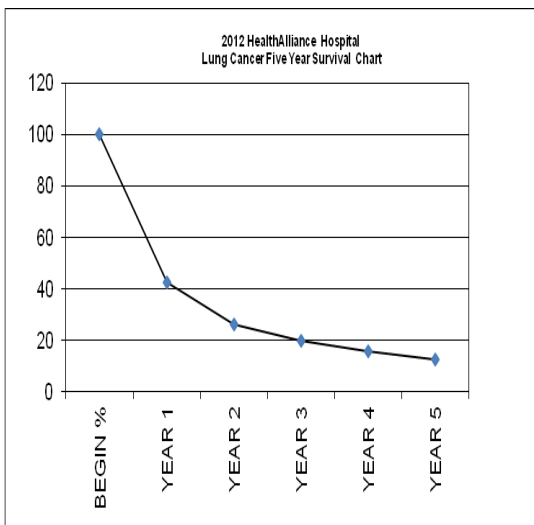


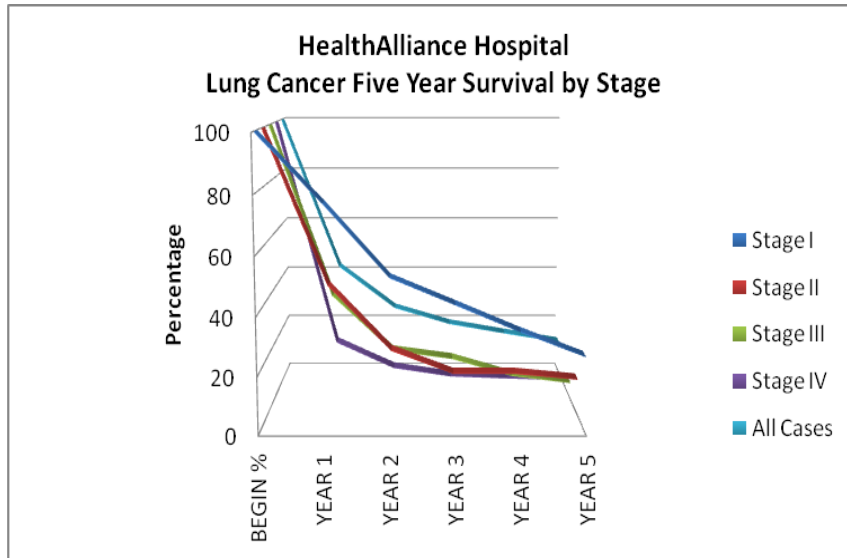
## LUNG CANCER REPORT AND DATA COMPARISON

An estimated 1,660,290 new cases of cancer will be diagnosed in the United States in the year 2013. In New York State the new cancer diagnosis estimate is 108,760. New York ranks fourth highest in the United States coming in under Texas (with an estimated 112,230), Florida (estimated 118,320) and California (with an estimated 171,330).

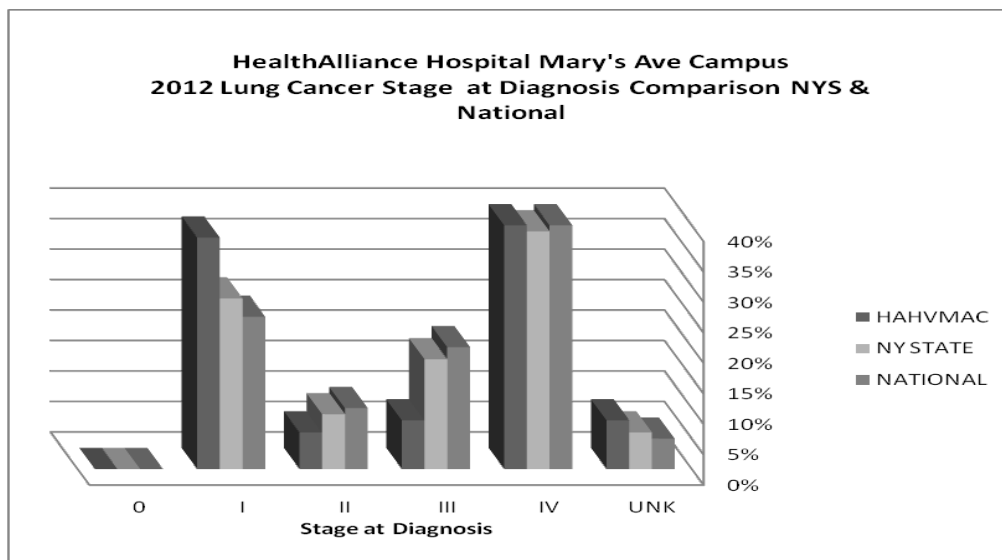
New lung cancer diagnosis is estimated to be 228,190 for the United States and 13,480 in New York State in the year 2013. Lung cancer accounts for about 14% of all cancer diagnoses in the United States, and accounts for about 27% of cancer deaths in the United States. The incident rate is declining in men over the last two decades but has only recently begun decreasing in women. From the years 2005 to 2009 incident rates decreased by 1.9% each year in men and by 0.3% in women.

Lung cancer accounts for the highest number of cancer deaths in both men and women. An estimated 159,480 deaths are expected to occur in the United States from lung cancer and 8,790 in New York State from lung cancer in 2013. The one year survival has increased in the United States from 35% in years 1975-1979 to 44% in years 2005-2008. The increase is considered largely due to improvements in surgical techniques and combined therapies. The 5 year survival for lung cancer, for all stages combined, is only about 16%. If the disease is still localized at the time of diagnosis the survival rate increases to 52%. At this time only about 15% of all lung cases are diagnosed at this early stage. The five year survival for small cell lung cancer is 6% and is lower than that of non-small cell lung cancer which is at 18%. The survival rate at Benedictine Hospital for all lung cancer patients is 12% at five years, 16% at four years, 20% at three years, 23% at two years and 43% at one year.





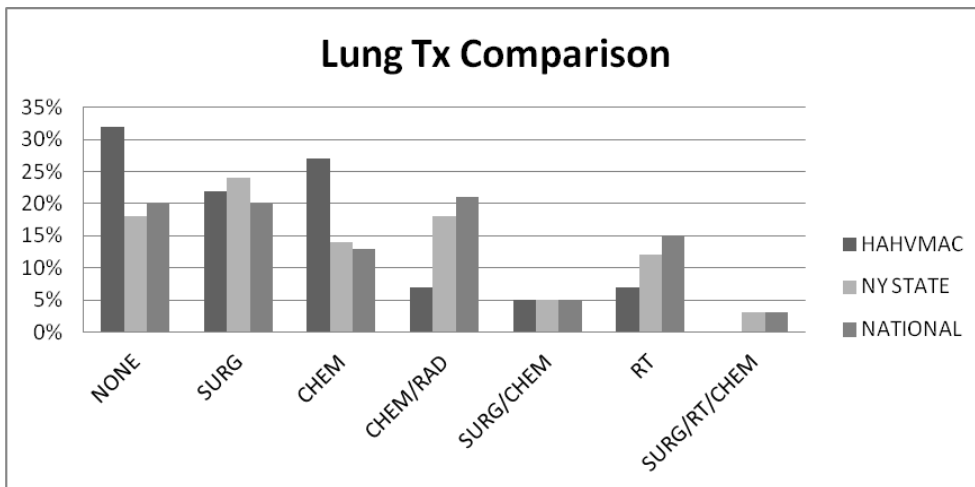
In 2012 Benedictine Hospital diagnosed or participated in first course of treatment for 63 lung cancer patients. Of the 63; 31 (49%) were male and 32 (51%) were female. There were 40% of patients diagnosed with Stage IV disease, compared to 39% in NY State and 40% Nationally. 8% of patients had Stage III disease, compared to 18% in NY State, 20% Nationally. 6% diagnosed with Stage II disease, compared to 9% NY State, 10% Nationally. 33% had Stage I at diagnosis, compared to 28% NY State and 25% Nationally. There were no Stage 0 (in situ) and 5 patients were classified as unknown stage, 8% compared to 6% NY State and 5% Nationally. Unknown stage includes patients who had a biopsy done but no further work-up or treatment so staging could not be completed.



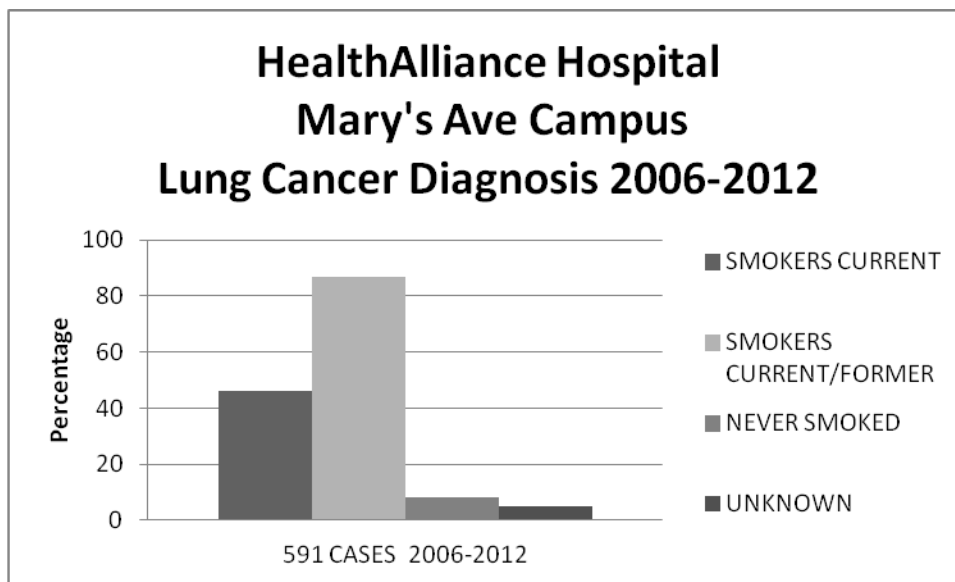


Annual screening for lung cancer with chest x-ray has not been shown to reduce lung cancer mortality. Results from National Lung Cancer Screening Trial (NLST) results show 20 percent fewer lung cancer deaths among trial participants screened with low-dose helical CT (also known as spiral CT) compared to those screened with standard chest X-ray. The data published in The New England Journal of Medicine February 21, 2013 with patient criteria that was derived from the PLCO (Prostate, Lung, Colorectal and Ovarian screening trial) predicted the six year risk at high accuracy and had a higher predictive value for lung cancer screening. The American Cancer Society (ACS), the National Comprehensive Cancer Network (NCCN), the American College of Chest Physicians (ACCP), and the American Society of Clinical Oncology (ASCO) have all issued initial lung cancer screening guidelines. The US Preventive Services Task Force (USPSTF) has issued a statement that in part stated *“This draft recommendation recognizes that low-dose spiral CT almost certainly saves lives when done on individuals at high risk of lung cancer, based on age and smoking history. It also recognizes that there are harms associated with spiral CT lung cancer screening.”*

Diagnosis and treatment for patients diagnosed at HealthAlliance Hospital on the Mary’s Ave Campus included CT guided biopsy, bronchoscopy with biopsy, mediastinoscopy with biopsy, wedge resection, and lobectomy, chemotherapy, and radiation. Treatment of lung cancer is based on type and stage of cancer. Targeted therapy used to identify and attack specific cancer cells such as buvaccizumab (Avastin), erlotinib (Tarceva) and crizotinib (Xalkori) are now available. Surgery is the treatment of choice for localized non-small cell lung cancers. Therapy can also be a combination of chemotherapy and radiation therapy. Chemotherapy alone or in combination is the usual treatment for small cell lung cancer. New advances such as stereotactic body radiosurgery (STBRS) and the use of molecularly targeted drugs improve treatment options for patients.



Smoking is the most significant risk factor for lung cancer. That risk increases with both quantity and duration. Other risk factors for lung cancer can be occupational or environmental exposure to secondhand smoke, asbestos, certain metals, some organic chemicals, radiation, air pollution, diesel exhaust, and paint. Exposure to radon gas released from soil and building materials is also a risk factor. There is genetic susceptibility that plays a role in the development of lung cancer particularly in those who develop it at a young age.



Of all lung cancer diagnosis at HealthAlliance Hospital Mary's Ave Campus, 46% were current smokers, 87% current or former smokers, 8% never smoked and 5% of patients it was unknown if they ever smoked.

*\*Data comparison made using Cancer Facts And Figures compiled by The American Cancer Society using sources from NAACCR (North American Association of Central Registries), SEER (Surveillance, Epidemiology and End Results), NCHS (National Center for Health Statistics) and CDC (Center for Disease Control) and the National Cancer Data Base (NCDB)*