

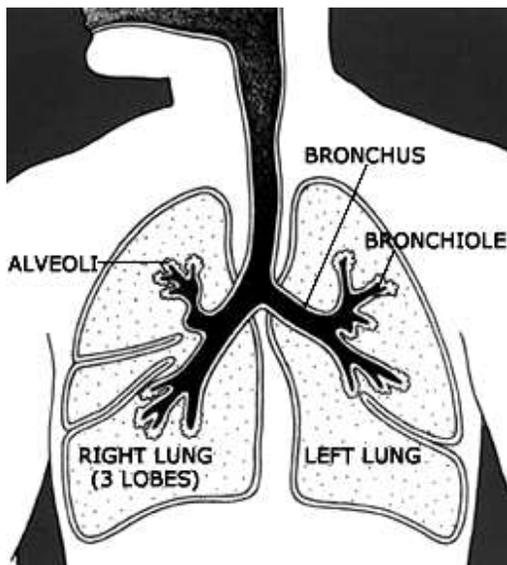


Lung Cancer

THE LUNGS

The lungs are sponge-like organs in the chest that function as part of the respiratory system. The right lung has three lobes and the left lung is smaller, with two lobes, in order to provide space for the heart. Air enters the nose or mouth, and then passes through the trachea and each bronchus before entering into the lungs.

Figure 1: Anatomy of the Lungs



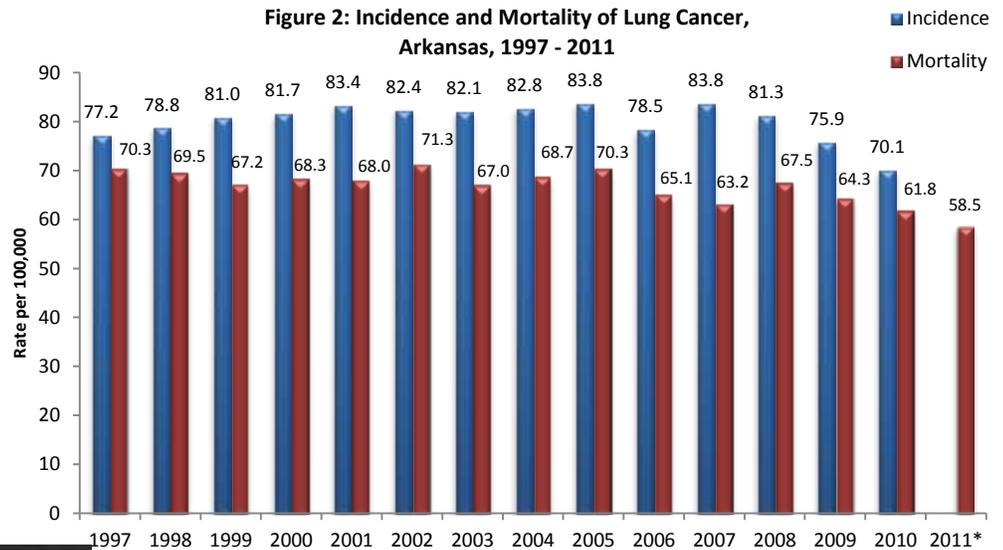
Source: Centers for Disease Control and Prevention (CDC)

LUNG CANCER

Lung cancer usually begins in the cells that line the bronchi and parts of the bronchioles and alveoli. It usually begins as pre-cancerous changes to the genes in the cells. These changes cannot be detected on an x-ray and do not cause symptoms. Over time, these pre-cancerous changes may progress to cancer and produce a tumor large enough to be seen on imaging tests. During the disease progression, lung cancer cells detach from the original tumor and spread (metastasize) to other parts of the body.

Lung cancer is considered a life-threatening disease because it may spread before it can be detected on an imaging test.¹ Cancers that start in other organs (breast, pancreas, kidney,

Figure 2: Incidence and Mortality of Lung Cancer, Arkansas, 1997 - 2011



Source: Arkansas Central Cancer Registry & Health Statistics Branch
*2011 Incidence data not available as of 9/3/2013

or skin) can sometimes metastasize to the lungs. These remain cancers of the primary site and are not considered lung cancers.

RISK FACTORS

Cigarette smoking is the most common risk factor associated with lung cancer. Approximately 90% of lung cancer deaths in men and almost 80% of lung cancer deaths in women are due to smoking. Examples of risk factors for lung cancer include:

- Smoking and being around others' smoke (secondhand smoke exposure);
- Things around us at home or work (such as radon gas or asbestos); and
- Personal traits (such as a family history of lung cancer).²

SIGNS AND SYMPTOMS

Lung cancer does not present symptoms at the earliest stages of disease. As the cancer progresses, common symptoms include:

- Persistent cough;
- Sputum streaked with blood;
- Chest pain;
- Voice changes; and
- Recurrent pneumonia or bronchitis.



Lung Cancer

WHY IS IT IMPORTANT?

Lung cancer is the second most common cancer diagnosed among men and women (behind prostate and breast cancers, respectively) and accounts for 15% of all newly diagnosed cancers.¹ It is also the leading cause of cancer deaths in the U.S. and in Arkansas and accounts for more cancer deaths than breast, prostate, and colorectal combined.^{1,3} Survival is based on stage at diagnosis, and most lung cancers are diagnosed at late stages of disease, see Figure 4.

HOW BIG IS THE PROBLEM IN ARKANSAS?

Since 1999, Arkansas' lung cancer incidence and death rates were higher than the rates for the U.S.³ This is largely due to the historically higher rates of smoking in Arkansas, see Figure 3.

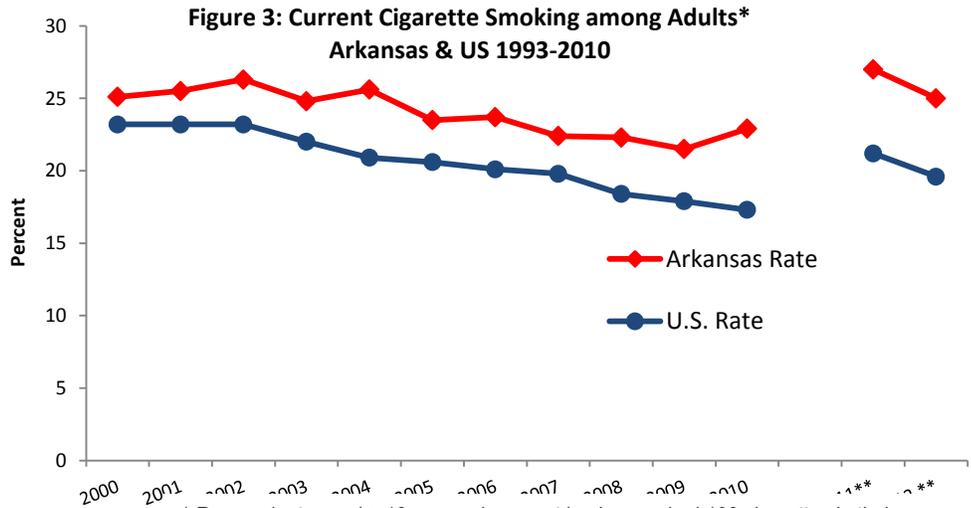
A total of 2,408 Arkansans were diagnosed with lung cancer in 2010 and 2,025 died of lung cancer in 2011, see Figure 2. The median age at diagnosis from 2004 – 2008 was 68 years.

Lung cancer occurs more frequently in men than women, but the gap is closing. According to the Arkansas Cancer Facts and Figures report, incidence rates among men have been dropping while the incidence rates among women have remained stable.³

PREVENTION AND DETECTION OF LUNG CANCER

The U.S. Preventive Task Force concludes there is not sufficient evidence to recommend screening for lung cancer among asymptomatic individuals using chest x-ray or sputum examination. Not smoking is the best way to prevent lung cancer.⁴

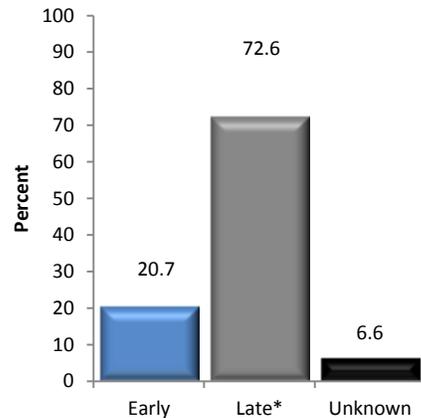
For more details about lung cancer in Arkansas, see the 2011 Cancer Facts and Figures Report on the Arkansas Central Cancer Registry's website: <http://www.healthy.arkansas.gov/programsServices/healthStatistics/CancerRegistry/Pages/Data.aspx>



* Respondents aged ≥ 18 years who report having smoked 100 cigarettes in their lifetime and are current smokers on every day or some days. Source: Behavioral Risk Factor Surveillance System (BRFSS)

** BRFSS 2011 and 2012 data are not directly comparable to previous years because of changes in weighting methodology and addition of cell phone sampling.

Figure 4: Lung Cancer, Stage at Diagnosis, Arkansas, 2006 - 2010



* Note: Late stage includes regional and distant stages of disease. Source: Arkansas Central Cancer Registry

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