



LUNG CANCER is not a single disease; rather, it is a group of cancers that originate in the lung and associated tissues. Lung cancer is the leading cause of cancer deaths in the United States and Indiana, killing over 150,000 Americans and approximately 4,000 Indiana residents every year.

Figure 1. Burden of Invasive Lung Cancer — Indiana, 2004-2008

	Average number of cases per year (2004–2008)	Rate per 100,000 people* (2004–2008)	Number of cases (2008)	Rate per 100,000 people† (2008)
Indiana Incidence	5,183	80.0	5,240	78.0
Indiana Deaths	3,986	61.6	4,166	62.1

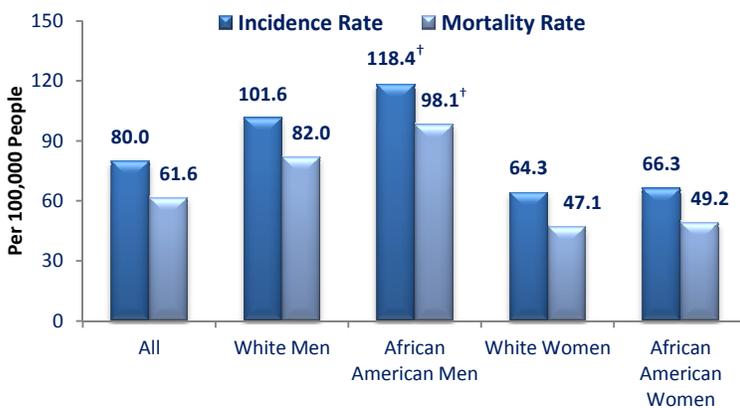
*Includes lung and bronchus cancers combined

†Age-adjusted

Source: Indiana State Cancer Registry

SMOKING accounts for 87% of lung cancer deaths and at least 30% of all cancer deaths. If all tobacco smoking was stopped, the occurrence of lung cancer would decrease by an estimated 90%; however, in Indiana, 25.6% of adults continue to smoke tobacco, placing them at great risk for developing lung and other types of cancer.

Figure 2. Age-adjusted Lung Cancer Incidence and Mortality Rates, by Race and Sex, 2004-2008



*Age-adjusted

†Significantly elevated ($P < .05$) compared to white males and all females

Source: Indiana State Cancer Registry

Who Is Most At Risk?

Smokers

- Lung cancer mortality rates are about 23 times higher for current male smokers and 13 times higher for current female smokers compared to people who have never smoked.
- Over 1 million adults in Indiana still smoke and Indiana's adult smoking rate remains among the highest in the nation (median adult smoking rate in the United States: 21.2% in 2011).

Those exposed to secondhand smoke

- Each year, an estimated 50,000 American and 1,240 Hoosier nonsmokers die from exposure to secondhand smoke (smoke breathed in involuntarily by someone who is not smoking).

Those exposed to other cancer-causing agents

- Exposure to asbestos, radon, arsenic, talc, vinyl chloride, coal products, and radioactive ores like uranium can increase people's risk for developing lung cancer, especially if they also smoke tobacco.

Males, especially African American males

- During 2004-2008, Indiana males, compared to females, had a 60% greater lung cancer incidence rate and a 75% greater mortality rate. This is mainly because a higher percentage of males have been smokers compared to females.
- In 2011, 27.5% of adult males and 23.7% of adult females reported being current smokers.
- African American males, in Indiana, have approximately 17% greater incidence and 20% greater lung cancer mortality rates than do white males.

Common Signs and Symptoms of Lung Cancer

- ❑ Persistent cough
- ❑ Sputum streaked with blood
- ❑ Chest pain
- ❑ Voice changes
- ❑ Recurrent pneumonia or bronchitis



Can Lung Cancer Be Detected Early?

- ❑ Early detection has not been shown to be effective in reducing mortality from lung cancer. Although recent advancements in diagnostic testing, such as low dose spiral computed tomography (also known as spinal CT) scans and molecular markers in sputum, have shown more promising outcomes and are being evaluated further for possible risks and their effectiveness.

What Factors Influence Lung Cancer Survival?

- ❑ Lung cancer is often diagnosed at a later stage, which negatively impacts a person's odds of survival. The five-year survival rate is highest (52%) if the lung cancer is diagnosed when it is confined entirely within the lung (i.e., localized); however, in Indiana, during 2004-2008, only 18% of lung cancers were diagnosed during this stage.
- ❑ The one-year relative survival for lung cancer increased from 35% during 1975-1979 to 42% during 2002-2005, largely because of improvements in surgical techniques and combined therapies. However, the five-year survival rate for all stages combined is currently only 16%. The five-year survival rate for small cell lung cancer (6%) is lower than that for non-small cell lung cancer (17%).
- ❑ Treatment options are determined by the type (small cell or non-small cell) and stage of cancer and include surgery, radiation therapy, chemotherapy and targeted therapies. For localized cancers, surgery is usually the treatment of choice. Because the disease has usually spread by the time it is discovered, radiation therapy and chemotherapy are often used, sometimes in combination with surgery.

TAKE ACTION: Steps to prevent and control lung cancer

For you:

- ❑ Be tobacco- and smoke-free: Call 1-800-QUIT-NOW or visit www.QuitNowIndiana.com for free tobacco cessation assistance.
- ❑ Avoid all secondhand smoke exposure.

For your community:

- ❑ Support smoke-free air policies and higher taxes on *all* tobacco products.
- ❑ Support tobacco control program funding to help reduce smoking rates and lessen the health care costs, including approximately \$487 million in Medicaid payments alone.
- ❑ Support the continued adoption of smoke-free workplaces. The United States Surgeon General has concluded that smoke-free workplace policies are the only effective way to eliminate exposure to secondhand smoke in the workplace and lead to less smoking among workers.
- ❑ Support health care provider outreach efforts that help decrease tobacco consumption and increase quit attempts.

GET INVOLVED: Join the Indiana Cancer Consortium (ICC)

- ❑ The ICC is a statewide network of over 100 agencies including the Indiana State Department of Health.
- ❑ ICC seeks to reduce the cancer burden in Indiana through the development, implementation and evaluation of a comprehensive plan that addresses cancer across the continuum from prevention through palliation.
- ❑ Become a member at www.IndianaCancer.org.

Community resources

- ❑ To get help with tobacco cessation, call the [Indiana Tobacco Quitline](http://www.IndianaTobaccoQuitline.com) at 1-800-QUIT-NOW (1-800-784-8669), or visit www.QuitNowIndiana.com.
- ❑ To learn more about [Indiana's Smoke Free Air Law](http://www.IndianaSmokeFreeAirLaw.com), visit www.BreatheIndiana.com.
- ❑ To learn more about the Lung Cancer Burden in Indiana, refer to the [Indiana Cancer Facts and Figures 2012: Lung Cancer](http://www.IndianaCancer.org) report at www.IndianaCancer.org.

References

1. Indiana Cancer Consortium, Indiana State Department of Health and the American Cancer Society Great Lakes Division; *Indiana Cancer Facts and Figures 2012*. March, 2012. Available at <http://indianacancer.org/resources-for-indiana-cancer-consortium-members/indianacancerfactsandfigures2012/>. Updated cancer statistics are available online from the Indiana State Cancer Registry Statistics Report Generator at <http://www.in.gov/isdh/24360.htm>.
2. Centers for Disease Control and Prevention, Behavior Risk Factor Surveillance Survey, 2011.