

LUNG CANCER

in Marion County



EXECUTIVE SUMMARY

This summary is a snapshot of the findings of an epidemiological review of the public health impact of lung cancer in recent years in Marion County, Ind. The full report is available at www.mchd.com/mchd_reports.htm.

LUNG CANCER INCIDENCE¹

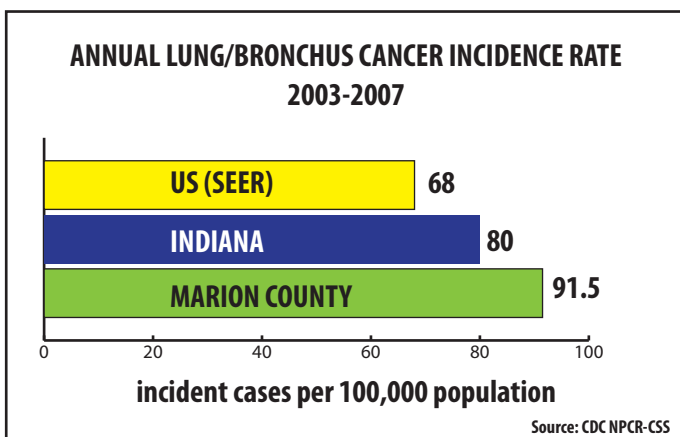
• Approximately 717 Marion County residents are diagnosed with lung cancer per year and 1 in 3 cases (35.3%) occur in working-age adults under age 65.

• *Marion County's rate for new lung cancer cases, significantly exceeds the state and national rates by 14% and 33%, respectively.*

• Lung cancer incidence rates among Marion County men are 50% higher than among women (113 versus 76 per 100,000). While gender-specific rates are significantly different, Whites' and Blacks' incidence rates are similar (91.5; 92.3, respectively).

• Men who smoke are 24 times more likely to develop lung cancer than similar non-smoking men; women who smoke are 13 times more likely to develop lung cancer than their non-smoking age-mates .²

• Lung cancer incidence in the county has declined from 128.9 cases per 100,000 (1998-2002) to 113.6 for the period 2003-07, a change primarily driven by declines among White men, but no significant changes occurred among women or Blacks, groups whose higher rates of smoking have occurred in more recent decades.

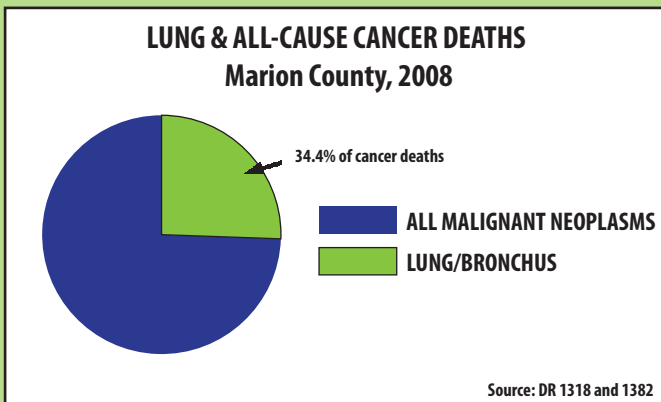


**MARION COUNTY
PUBLIC
HEALTH
DEPARTMENT**

Prevent. Promote. Protect.

LUNG CANCER MORTALITY

• Lung cancer made up 34% of all Marion County cancer deaths, and about 8% of all deaths, claiming the lives of approximately 525 residents in 2008.



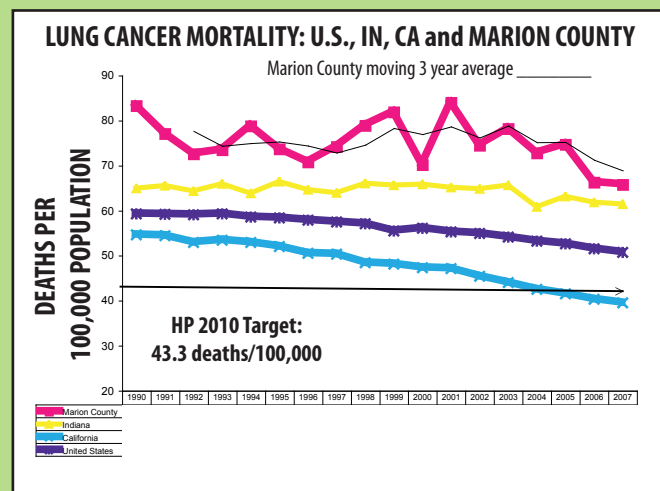
• Lung cancer is a deadly cancer: Less than 1 in 5 (17.8%) Marion County lung cancers are diagnosed in an early (localized) stage.³ Even at the earliest detection, the five-year probability of survival is only 55-67 percent (data for the period 1998-2008).

• County death rates due to lung cancer (72.7 per 100,000, 2003-07) exceed the U.S. rate (52.5) by 38%, the Indiana rate of 62.6 by 16%, and the Healthy People 2010/2020 objective by 52%. Indianapolis has been ranked among the 54 largest U.S. cities as the 6th highest in its rate of lung cancer deaths (2004).⁴

• In Indiana, lung cancer caused more deaths per year than colorectal, breast, and prostate cancers combined (2006), and the state ranks 8th highest in the nation in lung cancer mortality (2007).⁵

• Lung cancer death rates among Marion County men is 70% greater than among women (for the period 2003-07). While mortality rates have significantly fallen among Marion County men, lung cancer death rates for women are still increasing.

• Nationally, lung cancer is the leading cause of smoking related deaths (29% of all smoking-attributed deaths, or 129,000 preventable deaths/year), leading to lost productivity for smoking related lung cancer of \$36.8 billion.



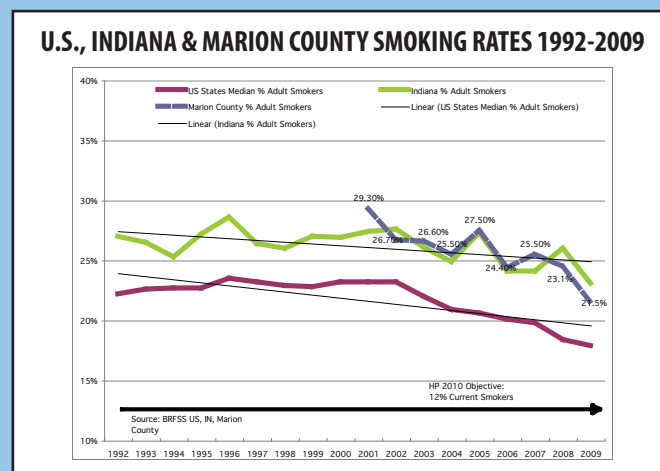
ELIMINATING SMOKING WOULD NEARLY ELIMINATE LUNG CANCER

• Smoking exposure is estimated to cause 82% of all trachea-bronchus-lung cancers.⁶

• Of the 525 lung cancer deaths in Marion County for 2008, conservatively 82%, or 430 deaths were preventable had these individuals not been exposed to tobacco smoke.

• While smoking rates have declined, state and county rates have decreased at a slower pace than the U.S.

• In 2009, the proportion of adults who smoke in the state (23.1%) and Marion County (21.5%) remain at nearly double the Healthy People 2010/2020 target of reducing smoking to 12% of the adult population.



REFERENCES

¹ National Cancer Institute Incidence Rate Report for Indiana by County. <http://statecancerprofiles.cancer.gov/incidencrates/index.php?stateFIPS=18&cancel=047&race=00&sex=0&age=01&type=incd&sortVariableName=rate&sortOrder=default> Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ..., 80-84, 85+)

² Edwards, BK, Ward, E., Kohler, BA, et al., Annual report to the nation on the status of cancer, 1975-2006, featuring colorectal cancer trends and impact of interventions (risk factors, screening, and treatment) to reduce future rates. *Cancer*, Feb 2010, 116(3):544-73. <http://onlinelibrary.wiley.com/doi/10.1002/cncr.24760/full>

³ Marion County for 2003-07: Indiana State Cancer Registry 22 September 2009, Report Generator. <http://www.in.gov/isdh/24360.htm>

⁴ Big Cities Health Inventory: The Health of Urban America, 2007, National Association of County and City Health Officials, Benbow, N., Editor. Washington, D.C. 2007.

⁵ Indiana Cancer Facts and Figures 2006, ISDH and the American Cancer Association, 2006 American Cancer Society, Great Lakes Division, Inc., page 21.

⁶ Smoking Attributable Mortality, Years of Potential Life Lost, and Productivity losses: United states 2000-2004, *MMWR* November 14, 2008, 57(45):1226-28