



# Facts about Lung Cancer

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## What You Should Know

- Lung cancer is the leading cause of cancer-related deaths in Michigan and the United States for both men and women.<sup>1,2,3</sup>
- Smoking is the leading cause of lung cancer. Tobacco smoke causes nearly 9 out of 10 cases of lung cancer.<sup>3</sup>
- The risk of developing lung cancer increases with the quantity and duration of cigarette consumption.<sup>3</sup>
- Tests used for early detection of lung cancer have not yet been shown to reduce lung cancer deaths. It is often hard to find lung cancer early; usually symptoms do not appear until the disease is already at an advanced stage. Chest x-rays, checking sputum (spit) under a microscope to look for cancer cells, and fiber-optic examination of the bronchial passages have shown limited effectiveness in reducing lung cancer deaths.<sup>3</sup>
- For high-risk patients, low dose spiral computed tomography (CT) scans and molecular markers in sputum have shown some promise in the early detection of lung cancer, however these tests have not shown a reduction in lung cancer deaths.<sup>3</sup>
- Treatment options vary depending on the stage and type of lung cancer (small cell or non-small cell). They may include chemotherapy, surgery, radiation therapy, or targeted therapies.<sup>3</sup>

## Risk Factors

- Cigarette, cigar and pipe smoking are the most significant risk factors for lung cancer.<sup>3</sup>
- Other risk factors include: occupational or environmental exposure to secondhand smoke, radon, asbestos (particularly among smokers), certain metals (chromium, cadmium, arsenic), some organic chemicals,

radiation, air pollution, and a personal or family history of lung cancer.<sup>3</sup>

- Genetics play a contributing role in the development of lung cancer, especially in those who develop the disease at a younger age.<sup>3</sup>

## Incidence and Mortality

- In 2007, 7,712 men and women were diagnosed with lung cancer, and in 2008, 5,883 individuals died of the disease in Michigan.<sup>4</sup>
- The American Cancer Society estimates that 221,130 Americans will be diagnosed and 156,940 will die of lung cancer in the United States in 2011.<sup>3</sup>
- In 2007, 95% of Michigan men and women newly diagnosed with lung cancer were 50 years of age or older.<sup>4</sup>
- Since the 1990s, lung cancer incidence and mortality rates have declined only slightly in Michigan, as well as nationally.
  - ✓ Lung cancer incidence rates in Michigan declined from 76.7 per 100,000 in 1998 to 72.4 per 100,000 in 2007.
  - ✓ Nationally, lung cancer incidence rates declined from 67.5 per 100,000 in 1998 to 59.3 per 100,000 in 2007.
  - ✓ Mortality due to lung cancer declined in Michigan from 56.1 per 100,000 in 1999 to 54.5 per 100,000 in 2008.
  - ✓ Nationally, mortality rates declined from 57.1 per 100,000 in 1998 to 50.7 per 100,000 in 2007.
- Michigan ranks 18th in the nation in lung cancer mortality.<sup>2</sup>
  - ✓ Higher lung cancer rates in Michigan may be due to the higher rates of smoking among adults compared with the national rate (18.9% versus 17.3%).<sup>5</sup>

- Both incidence and mortality rates for lung cancer in Michigan are higher among men when compared to women.<sup>1,4</sup>
- Both incidence and mortality rates for lung cancer in Michigan are higher among African Americans when compared to Caucasians.<sup>1,4</sup>

### Stage at Diagnosis

- Among individuals in Michigan diagnosed with lung cancer at the localized stage, 52.0% will survive at least five years. However, most cases of lung cancer are diagnosed after it has spread to the lymph nodes and other organs, when the five-year survival rate decreases to 24.2%.<sup>6</sup>
- In 2007, 18.5% of lung cancer cases among men and women in Michigan were diagnosed at the localized stage, 22.5% of cases were diagnosed at the regional stage, and 49.1% of cases were diagnosed at the distant stage.<sup>4</sup>

### Tobacco Use Behaviors

- In 2010, approximately 18.9% of Michigan adults were current smokers. Of current smokers, 21.0% are men and 17.0% are women.<sup>5</sup>
- Those with lower education levels and lower household incomes are more likely to be current smokers.<sup>5</sup>
- Among current smokers in Michigan aged 18 years and older, 62.3% tried to quit smoking for 1 day or longer in the past year.<sup>5</sup>
- In 2009, 18.8% of Michigan high school students reported smoking one or more days in the previous month.<sup>7</sup>
- In 2009, 53.6% of high school students who currently smoke have tried to quit in the past year.<sup>7</sup>

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