## Facts & Figures

### Lung Cancer and Tobacco Use in Wisconsin

- **80%** Percentage of lung cancer deaths caused by smoking
- **44%** Percentage of Wisconsin residents who are current or former smokers
- **4,230** Number of men and women expected to be diagnosed with lung cancer this year*
- **3,060** Number of men and women expected to die of lung cancer this year*
- **80%** Percentage of lung cancers diagnosed after they have spread to the beyond the lung
- **1 in 13** Lifetime risk for men of being diagnosed with lung cancer

*Estimates for 2016
Lung and Bronchus Cancer in Wisconsin

Overview
Lung cancer is the leading cause of cancer deaths for both men and women. Cigarette smoking causes the majority of all lung cancer deaths in Wisconsin. Stopping the use of tobacco could eliminate most lung cancer. Quitting smoking reduces an individual’s risk significantly, although former smokers remain at greater risk than those who never smoked.

Cancer Burden
More people die from lung cancer than from breast, prostate, and colorectal cancers combined. In Wisconsin, lung cancer killed an average of 2,967 residents per year during the five-year period 2009-2013, and an average of 4,026 new cases of lung cancer were diagnosed each year.

Both gender and race are factors in lung cancer incidence and mortality rates. Lung cancer incidence and mortality rates are significantly higher among Wisconsin males than Wisconsin females. In Wisconsin the age-adjusted lung cancer incidence rate for 2009-2013 was 61.1. Among men, the rate was 70.3 per 100,000, and among women, 54.5 per 100,000. The mortality rate was 44.9 per 100,000, with the rate for males of 54.9 and for females, 37.5

While men have traditionally experienced higher lung cancer rates, the difference has decreased in recent years. In Wisconsin, between 1995-2013, the incidence rate for lung cancer among women increased by 14%, compared to a 23% decrease among men (Figure 1). The 2013 male mortality rate decreased by 28% since 1995, but the female mortality rate increased by 9%. Wisconsin males had an average of 1,612 deaths from lung cancer each year, compared to an average of 1,355 deaths for Wisconsin females during 2009-2013.

American Indians/Native Alaskans and African Americans in Wisconsin are more likely than other races to be diagnosed with lung cancer and die from the disease. The state’s mortality rate for lung cancer for American Indians/Alaskan Natives for 2009-2013 was 77.5 per 100,000, and for African Americans, 71.0 per 100,000. The rate for whites was 43.9, and Asians/Pacific Islanders had a mortality rate of 20.9 per 100,000 (Figure 2).

Risk Factors
Cigarette smoking is the most important risk factor for lung cancer. Cigar and pipe smoking also increase risk.

Exposure to radon gas released by soil and building materials is estimated to be the second leading cause of lung cancer in the US.

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Figure 1. Trends in Lung Cancer Incidence and Mortality by Sex, Wisconsin, 1995-2013

![Graph showing trends in lung cancer incidence and mortality by sex.]

Rates are per 100,000 and age-adjusted to the 2000 US standard population.

Source: Wisconsin Cancer Reporting System, Office of Health Informatics, Division of Public Health, Department of Health Services, and the National Center for Health Statistics.

Figure 2. Lung Cancer Incidence and Mortality by Race and Ethnicity, Wisconsin, 2009-2013

![Graph showing lung cancer incidence and mortality by race and ethnicity.]

Note: Hispanic includes all races. Rates are per 100,000 and age-adjusted to the 2000 US standard population.

Other risk factors include environmental or occupational exposure to secondhand tobacco smoke, asbestos (particularly among smokers), certain metals (chromium, cadmium, arsenic), some organic chemicals, radiation, air pollution, and diesel exhaust.

Genetic susceptibility plays a contributing role in the development of lung cancer, especially in those who develop the disease at a young age.

Risk Reduction
Lung cancer is the most preventable cancer. People who stop smoking before age 50 cut their risk of dying in the next 15 years in half compared with those who keep smoking. Quitting at a younger age will reduce the health risks more, but quitting at any age can give back years of life that would have been lost by continued smoking.

Screening/Early Detection
Screening with low-dose spiral computed tomography (LDCT) has been shown to reduce lung cancer mortality by 20% compared to standard chest x-ray among adults with at least a 30 pack-year smoking history who were current smokers or had quit within 15 years. The American Cancer Society guidelines for the early detection of lung cancer endorse a process of shared decision making between clinicians who have access to high-volume, high-quality lung cancer screening programs and current or former smokers (quit within 15 years) who are ages 55-74, in good health, and with at least a 30 pack-year history of smoking.

Smoking cessation counseling remains a high priority for clinical attention in discussions with current smokers, who should be informed of their continuing risk of lung cancer. Screening should not be viewed as an alternative to smoking cessation.

Stage at Diagnosis
Lung cancer in the state is most often diagnosed at an advanced stage, or distant stage (53% of new cases, 2009-2013), which negatively impacts the length of survival. The five-year probability of survival is highest if lung cancer is diagnosed early, with a 57% five-year Wisconsin survival rate for lung cancers diagnosed at the localized stage. However, only 20% of lung cancers in Wisconsin were diagnosed at this early stage during the recent five-year period. Typically, lung cancer has a lower survival rate compared with other major cancers; the five-year survival rate for lung cancer is 19%, but the rate is much higher for female breast cancer (89%), prostate cancer (96%), and colorectal cancer (67%).

Tobacco Use
Tobacco
Smoking remains the world’s most preventable cause of death. The devastating effects of tobacco use in the health and welfare of society are now widely recognized.

The best way to avoid lung cancer is to not start using tobacco or to quit if you do use it. Cigarette smoking also increases the risk of cancers of the oral cavity and pharynx, larynx, esophagus, pancreas, uterine cervix, kidney, bladder, stomach, colorectum, and liver, as well as acute myeloid leukemia.

Cigar smoking increases the risk of cancers of the lung, oral cavity, larynx, esophagus, and probably pancreas.

Smokeless tobacco products include moist snuff, chewing tobacco, snus, and dissolvable nicotine products, such as strips, orbs, and sticks. These products cause oral, esophageal, and pancreatic cancers; and precancerous lesions of the mouth.

Figure 3. Trends in Prevalence of Adult Current Cigarette Smoking by Sex in Wisconsin, 2001-2013

Current cigarette smoking: persons who reported smoking every day or some days.
Trends in Tobacco Use

The prevalence of smoking in Wisconsin has declined since 2000, but 17% of adults ages 18 and older report current (2014) cigarette smoking. Figure 3 depicts tobacco use by sex in the state in 2011-2014. The prevalence of smoking in 2011 was 19.1% for females and 22.7% for males, but by 2014 had declined to 16.1% among women and 18.7% among men. In 2014, for both sexes combined, the 25- to 34-year-old age group had the highest percentage of smokers (Figure 4).

According to the Wisconsin Youth Risk Behavior Survey (YRBS) for 2013, approximately 14% of male high school students and 10% of female high school students in Wisconsin reported smoking (Figure 5). The YRBS also reported a decline in the percentage of all high school students who were current smokers (smoked a cigarette at least one day out of the prior 30 days) from 38% in 1999 to 12% in 2013.

Quitting Smoking in Wisconsin

There are a number of treatments that can help tobacco users quit and thus reduce the incidence of lung and bronchus cancer. Tobacco users who are ready to quit can consult their physicians, who will conduct an intervention and prescribe an appropriate medication.

Medication combined with practical, individualized counseling provides effective nicotine dependence treatment. Resources for quitting smoking can be obtained by calling the Wisconsin Tobacco Quit Line (1-800-QUIT-NOW or 1-800-784-8669). The quit line provides practical advice on the process of quitting tobacco use. The free service is sponsored by the Wisconsin Department of Health Services.